

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

I.—THE PSYCHOLOGICAL STANDPOINT.

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I.

It is a good omen for the future of philosophy that there is now a disposition to avoid discussion of particular cases in dispute, and to examine instead the fundamental presuppositions and method. This is the sole condition of discussion which shall be fruitful, and not word-banding. It is the sole way of discovering whatever of fundamental agreement there is between different tendencies of thought, as well as of showing on what grounds the radical differences are based. It is therefore a most auspicious sign that, instead of eagerly clamouring forth our views on various subjects, we are now trying to show *why* we hold them and *why* we reject others. It is hardly too much to say that it is only within the past ten years that what is vaguely called Transcendentalism has shown to the English reading world just why it holds what it does, and just what are its objections to the method most characteristically associated with English thinking. Assertion of its results, accompanied with attacks upon the results of Empiricism, and *vice versa*, we had before; but it is only recently that the grounds, the reasons, the method have been stated. And no one can deny that the work has been done

well, clearly, conscientiously and thoroughly. English philosophy cannot now be what it would have been, if (to name only one of the writers) the late Prof. Green had not written. And now that the differences and the grounds for them have been so definitely and clearly stated, we are in a condition, I think, to see a fundamental agreement, and that just where the difference has been most insisted upon, *viz.*, in the standpoint. It is the *psychological* standpoint which is the root of all the difference, as Prof. Green has shown with such admirable lucidity and force. Yet I hope to be able to suggest, if not to show, that after all the psychological standpoint is what both sides have in common. In this present paper, I wish to point out that the defects and contradictions so powerfully urged against the characteristic tendency of British Philosophy are due—not to its psychological standpoint but—to its *desertion* of it. In short, the psychological basis of English philosophy has been its strength: its weakness has been that it has left this basis—that it has not been psychological enough.

In stating what is the psychological standpoint, care has to be taken that it be not so stated as to prejudice at the outset the whole matter. This can be avoided only by stating it in a very general manner. Let Locke do it. "I thought that the first step towards satisfying several inquiries the mind of man was very apt to run into was to take a view of our own understandings, examine our own powers, and see to what things they were adapted." (Book i., ch. 1, § 7.) This, with the further statement that "Whatsoever is the object of the understanding when a man thinks" is an Idea, fixed the method of philosophy. We are not to determine the nature of reality or of any object of philosophical inquiry by examining it as it is in itself, but only as it is an element in our knowledge, in our experience, only as it is related to our mind, or is an 'idea'. As Prof. Fraser well puts it, Locke's way of stating the question "involves the fundamental assumption of philosophy, that real things as well as imaginary things, whatever their absolute existence may involve, exist for us only through becoming involved in what we mentally experience in the course of our self-conscious lives" (*Berkeley*, p. 20). Or, in the ordinary way of putting it, the nature of all objects of philosophical inquiry is to be fixed by finding out what experience says about them. And psychology is the scientific and systematic account of this experience. This and this only do I understand to be essential to the psychological standpoint, and, to avoid misunderstanding from the start, I shall ask the reader not

to think any more into it, and especially to avoid reading into it any assumption regarding its 'individual' and 'introspective' character. The further development of the standpoint can come only in the course of the article.

Now that Locke, having stated his method, immediately deserted it, will, I suppose, be admitted by all. Instead of determining the nature of objects of experience by an account of our knowledge, he proceeded to explain our knowledge by reference to certain unknowable substances, called by the name of matter, making impressions on an unknowable substance, called mind. While, by his method he should explain the nature of 'matter' and of 'mind'—two "inquiries the mind of man is very apt to run into"—from our own understandings, from 'ideas,' he actually explains the nature of our ideas, of our consciousness, whether sensitive or reflective, from that whose characteristic, whether mind or matter, is to be *not* ideas nor consciousness nor in any possible relation thereto, because utterly unknowable. Berkeley, in effect, though not necessarily, as it seems to me, in intention, deserted the method in his reference of ideas to a purely transcendent spirit. Whether or not he conceived it as purely transcendent, yet at all events, he did not show its necessary immanence *in* our conscious experience. But Hume? Hume, it must be confessed, is generally thought to stand on purely psychological ground. This is asserted as his merit by those who regard the theory of the association of ideas as the basis of all philosophy; it is asserted as his defect by those who look at his sceptical mocking of knowledge as following necessarily from his method. But according to both, he, at least, was consistently psychological. Now the psychological standpoint is this: nothing shall be admitted into philosophy which does not show itself in experience, and its nature, that is, its place in experience shall be fixed by an account of the process of knowledge—by Psychology. Hume reversed this. He started with a theory as to the nature of reality and determined experience from that. The only reals for him were certain unrelated sensations and out of these knowledge arises or becomes. But if knowledge or experience becomes from them, then *they* are never known and never can be. If experience *originates* from them, they never were and never can be elements *in* experience. Sensations as known or experienced are always related, classified sensations. That which is known as existing only in experience, which has its existence only as an element of knowledge, cannot be the same when transported out of knowledge, and made its origin. A known

sensation has its sole existence *as* known ; and to suppose that it can be regarded as *not* known, as prior to knowledge, and still be what it is *as* known, is a logical feat which it is hoped few are capable of. Hume, just as much as Locke, assumes that something exists out of relation to knowledge or consciousness, and that this something is ultimately the only real, and that from it knowledge, consciousness, experience come to be. If this is not giving up the psychological standpoint, it would be difficult to tell what is. Hume's "distinct perceptions which are distinct existences," and which give rise to knowledge only as they are related to each other, are so many things-in-themselves. They existed prior to knowledge, and therefore are not for or within it.

But it will be objected that all this is a total misapprehension. Hume did not assume them *because* they were prior to and beyond knowledge. He examined experience and found, as any one does who analyses it, that it is made up of sensations ; that, however complex or immediate it appears to be, on analysis it is always found to be but an aggregate of grouped sensations. Having found this by analysis, it was his business, as it is that of every psychologist, to show *how* by composition these sensations produce knowledge and experience. To call them things-in-themselves is absurd—they are the simplest and best known things in all our experience. Now this answer, natural as it is, and conclusive as it seems, only brings out the radical defect of the procedure. The dependence of our knowledge upon sensations—or rather that knowledge is nothing but sensations as related to each other—is not denied. What is denied is the correctness of the procedure which, discovering a certain element *in* knowledge to be necessary for knowledge, therefore concludes that this element has an existence prior to or apart from knowledge. The alternative is not complex. Either these sensations are the sensations which are known—sensations which are elements in knowledge—and then they cannot be employed to account for its origin ; or they can be employed to account for its origin, and then are not sensations as they are known. In this case, they must be something of which nothing can be said except that they are *not* known, *are* not in consciousness—that they are things-in-themselves. If, in short, these sensations are not to be made 'ontological,' they must be sensations known, sensations which are elements in experience ; and if they exist only for knowledge, then knowledge is wherever they are, and they cannot account for its origin. The supposed objection rests upon a distinction between sensations as they are known,

and sensations as they exist. And this means simply that existence—the only real existence—is not for consciousness, but that consciousness comes about from it; it makes no difference that one calls it sensations, and another the ‘real existence’ of mind or matter. If one is anxious for a thing-in-itself in one’s philosophy, this will be no objection. But we who are psychological, who believe in the relativity of knowledge, should we not make a halt before we declare a fundamental disparity between a thing as it is and a thing as it is known—whether that thing be sensation or what not?

As this point is fundamental, let me dwell upon it a little. All our knowledge originates from sensations. Very good. But what are these sensations? Are they the sensations which we know: the classified related sensations: *this* smell, or *this* colour? No, these are the results of knowledge. They too presuppose sensations as their origin. What about these original sensations? They existed before knowledge, and knowledge originated and was developed by their grouping themselves together. Now, waiving the point that knowledge *is* precisely this grouping together and that therefore to tell us that it originated from grouping sensations is a good deal like telling us that knowledge originated knowledge, that experience is the result of experience,—I must inquire again what these sensations are. And I can see but this simple alternative: either they are known, are, from the first, elements in knowledge, and hence cannot be used to account for the origin of knowledge; or they are not, and, what is more to the point, they never can be. As soon as they are known, they cease to be the pure sensation we are after and become an element *in* experience, *of* knowledge. The conclusion of the matter is, that sensations which can be used to account for the *origin* of knowledge or experience, are sensations which cannot be known, are things-in-themselves which are not relative to consciousness. I do not here say that there are not such: I only say that, if there are, we have given up our psychological standpoint and have become ‘ontologists’ of the most pronounced character.

But the confusion is deeply rooted, and I cannot hope that I have yet shown that any attempt to show the *origin* of knowledge or of conscious experience, presupposes a division between things as they are for knowledge or experience and as they are in themselves, and is therefore non-psychological in character. I shall be told that I am making the whole difficulty for myself; that I persist in taking the standpoint of an adult whose experience is already formed; that I must

become as an infant to enter the true psychological kingdom. If I will only go back to that stage, I shall find a point where knowledge has not yet begun, but where sensations must be supposed to exist. Owing to our different standing, since these sensations have to us been covered with the residues of thousands of others and have become symbolic of them, we cannot tell what these sensations are; though in all probability they are to be conceived in some analogy to nervous shocks. But the truth of our psychological analysis does not depend upon this. The fact that sensations exist before knowledge and that knowledge comes about by their organic registration and integration is undisputed. And I can imagine that I am told that if I would but confine myself to the analysis of given facts, I should find this whole matter perfectly simple—that the sensations have not the remotest connexion with any sort of ‘metaphysics’ or analogy with things-in-themselves, and that we are all the time on positive scientific ground. I hope so. We are certainly approaching some degree of definiteness in our conception of what constitutes a sensation. But I am afraid that in thus defining the nature of a sensation, in taking it out of the region of vagueness, my objector has taken from it all those qualities which would enable it to serve as the origin of knowledge or of conscious experience. It is no longer a thing-in-itself, but neither is it, I fear, capable of accounting for experience. For, alas, we have to use experience to account for it. An infant, whether I think myself back to my early days or select some other baby, is, I suppose, a known object existing in the world of experience; and his nervous organism and the objects which affect it, these too, I suppose, are known objects which exist for consciousness. Surely it is not a baby thing-in-itself which is affected, nor a world thing-in-itself which calls forth the sensation. It is the known baby and a known world in definite action and reaction upon each other, and this definite relation is precisely a sensation. Yes, we are on positive scientific ground, and for that very reason we are on ground where the origin of knowledge and experience cannot be accounted for. Such a sensation I can easily form some conception of. I can even imagine how such sensations may by their organic registration and integration bring about that knowledge which I may myself possess. But such a sensation is not prior to consciousness or knowledge. It is but an element in the world of conscious experience. Far from being that from which all relations spring, it is itself but one relation—the relation between an organic body, and one acting upon

it. Such a sensation, a sensation which exists only within and for experience, is not one which can be used to account for experience. It is but one element in an organic whole, and can no more account for the whole, than a given digestive act can account for the existence of a living body, although this digestive act and others similar to it may no doubt be shown to be all important in the formation of a given living body. In short, we have finally arrived at the root of the difficulty. Our objector has been supposing that he could account for the origin of consciousness or knowledge because he could account for the process by which the given knowledge of a given individual came about. But if he accounts for this by something which is not known, which does not exist for consciousness, he is leaving the psychological standpoint to take the ontological; if he accounts for it by a known something, as a sensation produced by the reaction of a nervous organism upon a stimulus, he is accounting for its origin from something which exists only for and within consciousness. Consequently he is not accounting for the origin of consciousness or knowledge as such at all. He is simply accounting for the origin of an individual consciousness, or a specific group of known facts, by reference to the larger group of known facts or universal consciousness. Hence also the historic impotency of all forms of materialism. For either this matter is unknown, is a thing-in-itself, and hence may be called anything else as well as matter; or it is known, and then becomes but one set of the relations which in their completeness constitute mind,—when to account for mind from it is to assume as ultimate reality that which has existence only as substantiated by mind. To the relations of the individual to the universal consciousness, I shall return later. At present, I am concerned only to point out that, if a man comes to the conclusion that *all* knowledge is relative, that existence means existence for consciousness, he is bound to apply this conclusion to his starting-point and to his process. If he does this, he sees that the starting-point (in this case, sensations) and the process (in this case, integration of sensations) exist for consciousness also—in short, that the *becoming* of consciousness exists for consciousness only, and hence that consciousness can never have become at all. That for which all origin and change exists, can never have originated or changed.

I hope that my objector and myself have now got within sight of each other so that we can see our common ground, and the cause of our difference. We both admit that the

becoming of certain definite forms of knowledge, say Space, Time, Body, External World, &c., &c., may (in ideal, at least, if not yet as matter of actual fact) be accounted for, as the product of a series of events. Now he supposes that, because the origin of some or all of our knowledge or conscious experience, knowledge of all particular things and of all general relations, can be thus accounted for, he has thereby accounted for the origin of consciousness or knowledge itself. All I desire to point out is that he is always accounting for their origin *within* knowledge or conscious experience, and that he cannot take his first step or develop this into the next, cannot have either beginning or process, without presupposing known elements—the whole sphere of consciousness, in fact. In short, what he has been doing, is not to show the origin of consciousness or knowledge, but simply how consciousness or knowledge has differentiated itself into various forms. It is indeed the business of the psychologist to show how (not the *ideas* of space and time, &c., but) space, time, &c., arise, but since this origin is only within or for consciousness, it is but the showing of how knowledge develops *itself*; it is but the showing of how consciousness specifies itself into various given forms. He has not been telling us how knowledge became, but how it came to be in a certain way, that is, in a certain set of relations. In making out the origin of any or all particular knowledges (if I may be allowed the word), he is but showing the elements of knowledge. And in doing this, he is performing a twofold task. He is showing on the one hand what place they hold within experience, *i.e.*, he is showing their special adequacy or validity, and on the other he is explicating the nature of consciousness or experience. He is showing that it is not a bare form, but that, since these different elements arise necessarily within it, it is an infinite richness of relations. Let not the psychologist imagine then that he is showing the *origin* of consciousness, or of experience. There is nothing but themselves from which they can originate. He is but showing *what they are*, and, since they *are*, what they always have been.

I hope that it has now been made plain that the polemic against the attempt of the psychologist to account for the origin of conscious experience does not originate in any desire to limit his sphere but simply to call him away from a meaningless and self-contradictory conception of the psychological standpoint to an infinitely fruitful one. The psychological standpoint as it has developed itself is this: all that is, is for consciousness or knowledge. The business

of the psychologist is to give a genetic account of the various elements within this consciousness, and thereby fix their place, determine their validity, and at the same time show definitely what the real and eternal nature of this consciousness is. If we actually believe in experience, let us be in earnest with it, and believe also that if we only ask, instead of assuming at the outset, we shall find what the infinite content of experience is. How experience became we shall never find out, for the reason that experience always is. We shall never account for it by referring it to something else, for 'something else' always is only for and in experience. *Why* it is, we shall never discover, for it is a whole. But how the elements within the whole become we may find out, and thereby account for them by referring them to each other and to the whole, and thereby also discover why they are.

We have now reached positive ground, and, in the remainder of the paper, I wish to consider the relations, within this whole, of various specific elements which have always been "inquiries into which the mind of man was very apt to run," *viz.*: the relations of Subject and Object, and the relations of Universal and Individual, or Absolute and Finite.

II.

From the psychological standpoint the relation of Subject and Object is one which exists within consciousness. And its nature or meaning must be determined by an examination of consciousness itself. The duty of the psychologist is to show how it arises for consciousness. Put from the positive side, he must point out how consciousness differentiates itself so as to give rise to the existence within, that is for, itself of subject and object. This operation fixes the nature of the two (for they have no nature aside from their relation in consciousness), and at the same time explicates or develops the nature of consciousness itself. In this case, it reveals that consciousness is precisely the unity of subject and object.

Now psychology has never been so false to itself as to utterly forget that this is its task. From Locke downwards we find it dealing with the problems of the origin of space, time, the 'ideas' of the external world, of matter, of body, of the *Ego*, &c., &c. But it has interpreted its results so as to deprive them of all their meaning. It has most successfully avoided seeing the necessary implications of its own pro-

cedure. There are in particular two interpretations by which it has evaded the necessary meaning of its own work.

The first of these I may now deal with shortly, as it is nothing but our old friend *x*, the thing-in-itself in a new guise. It is Reasoned or Transfigured Realism. It sees clearly enough that everything which we know is relative to our consciousness, and it sees also clearly enough that *our* consciousness is also relative. All that we can know exists for our consciousness; but when we come to account for our consciousness we find that this too is dependent. It is dependent on a nervous organism; it is dependent upon objects which affect this organism. It is dependent upon a whole series of past events formulated by the doctrine of evolution. But this body, these objects, this series of events, they too exist but for our consciousness. Now there is no '*metaphysics*' about all this. It is positive science. Still there is a contradiction. Consciousness at once depends upon objects and events, and these depend upon, or are relative to consciousness. Hence the fact of the case must be this: The nervous organism, the objects, the series of events *as known* are relative to our consciousness, but since this itself is dependent, is a product, there is a reality behind the processes, behind our consciousness, which has produced them both. Subject and object as known *are* relative to consciousness, but there is a larger circle, a real object from which both of them emerge, but which can never be known, since to know is to relate to our consciousness. This is the problem: on one hand, the relativity of all knowledge to our consciousness; on the other, the dependence of our consciousness on something not itself. And this is the solution: a real not related to consciousness, but which has produced both consciousness itself, and the objects which as known are relative to consciousness. Now all that has been said in the first part of this article has gone for naught if it is not seen that such an argument is not a solution of the contradiction, but a statement of it. The problem is to reconcile the undoubted relativity of all existence as known, to consciousness, and the undoubted dependence of our own consciousness. And it ought to be evident that the only way to reconcile the apparent contradiction, to give each its rights without denying the truth of the other, is to think them together. If this is done, it will be seen that the solution is that the consciousness to which all existence is relative is not our consciousness, and that our consciousness is itself relative to consciousness in general. But Reasoned Realism attempts to solve the

problem not by bringing the elements together, but by holding them apart. It does not seek the higher unity which enables each to be seen as indeed true, but it attempts to divide. It attributes one element of the contradiction to our consciousness, and another to a thing-in-itself—the unknown reality. But this is only an express statement of the contradiction. If all *be* relative to consciousness, there is no thing-in-itself, just consciousness itself. If there be a thing-in-itself then all is not relative to consciousness. Let a man hold the latter if he will, but let him expressly recognise that thereby he has put himself on ‘ontological’ ground and adopted an ‘ontological’ method. Psychology he has for ever abandoned.

The other evasion is much more subtle and ‘reasoned’. It is a genuine attempt to untie the Gordian knot, as the other was a slashing attempt to cut it with the sword of a thing-in-itself. It is Subjective Idealism. And I wish now to show that Subjective Idealism is *not* the meaning of the psychological standpoint applied to the relation of subject and object. It is rather a misinterpretation of it based upon the same refusal to think two undoubted facts in their unity, the same attempt to divide the contradiction instead of solving it, which we have seen in the case of attempts to determine the origin of knowledge, and of Transfigured Realism. The position is this: The necessary relation of the world of existences to consciousness is recognised. “There is no possible knowledge of a world except in reference to our minds—knowledge is a state of mind. The notion of material things is a mental fact. We are incapable even of discussing the existence of an independent material world; the very fact is a contradiction. We can speak only of a world presented to our own minds” (Bain: *The Senses and the Intellect*, p. 375). But this being stated, consciousness is now separated into two parts—one of which is the subject, which is identified with mind, *Ego*, the Internal; while the other is the object, which is identified with the External, the *Non-Ego*, Matter. “Mind is definable, in the first instance, by the *method of contrast*, or as a remainder arising from *subtracting the object world from the totality of conscious experience*” (*Ibid.*, p. 1). “The totality of our mental life is made up of *two kinds* of consciousness—the object consciousness and the subject consciousness. The first is the external world, or *Non-Ego*; the second is our *Ego*, or mind proper” (*Ibid.*, p. 370). Consciousness “includes our object states as well as our subject states. The object and subject are *both parts* of our being, as I conceive, and

hence we have a subject consciousness, which is in a special sense Mind (*the scope of mental science*), and an object consciousness in which all other sentient beings participate, and which gives us the extended and material universe" (*Ibid.*, 669). It is, of course, still kept in view (which constitutes the logical superiority of Subjective Idealism over Realism) that "the object consciousness, which we call Externality, is still a mode of self in the most comprehensive sense" (p. 378). "Object experience is still conscious experience, that is Mind" (p. 2). I have quoted at this length because the above passages seem to me an admirable statement of a representative type of Subjective Idealism.

The logic of the process seems to be as follows. It is recognised that all existence with which philosophy or anything else has to do must be known existence—that is, that all existence is for consciousness. If we examine this consciousness, we shall find it testifying to "two kinds of consciousness"—one, a series of sensations, emotions and ideas, &c., the other, objects determined by spatial relations. We have to recognise then two parts in consciousness, a subject part, mind more strictly speaking, and an object part, commonly called the external world or matter. But it must not be forgotten that this after all is a part of my own being, my consciousness. The subject swallows up the object. But this subject, again, "segregates" itself into "two antithetical halves," into "two parts," the subject and the object. Then again the object vanishes into the subject, and again the subject divides itself. And for ever the process is kept up. Now the point I wish to make is that consciousness is here used in two entirely different senses, and that the apparent plausibility of the argument rests upon their confusion. There is consciousness in the broad sense, consciousness which includes subject and object; and there is consciousness in the narrow sense, in which it is equivalent to "mind," "*Ego*," that is, to the series of conscious states. The whole validity of the argument rests, of course, upon the supposition that ultimately these two are just the same—that it is the individual consciousness, the "*Ego*," which differentiates itself into the "two kinds of consciousness," subject and object. If not, "mind," as well as "matter"—the series of psychical states or events which constitute the *Ego* and are "the scope of mental science," as well as that in which all "sentient beings participate"—is but an element in consciousness. If this be so, Subjective Idealism is abandoned and Absolute Idealism (to which I hardly need say this article has been constantly pointing) is assumed.

The essence of Subjective Idealism is that the subject consciousness or mind, which remains after the "object world has been subtracted," is that for which after all this object world exists. Were this not so—were it admitted that this subject, mind, and the object, matter, are both but *elements within*, and both exist only *for*, consciousness—we should be in the sphere of an eternal absolute consciousness, whose partial realisation both the individual "subject" and the "external world" are. And I wish to show that this is the only meaning of the facts of the case; that Subjective Idealism is but the bald statement of a contradiction.

This brief digression is for the purpose of showing that, to Subjective Idealism, the consciousness for which all exists is the consciousness which is called mind, *Ego*, "my being". The point which I wished to make was that this identification is self-contradictory, although it is absolutely necessary to this form of Idealism. I shall be brief here in order not to make a simple matter appear complicated. How can consciousness which gives rise to the "two kinds" of consciousness be identified with either of them? How can the consciousness which in its primary aspect exists in time as a series of psychical events or states be the consciousness for which a permanent world of spatially related objects, in which "all sentient beings participate," exists? How can the "mind" which is defined by way of "contrast," which exists after the object world has been "subtracted" be the mind which is the whole, of which subject and object are alike elements? To state that the mind, in the first instance, is but the remainder from the totality of conscious experience "minus the object world, and to state also that this object world is itself a part of mind,"—what is that but to state in terms a self-contradiction? Unless it be to state that this way of looking at mind, "in the first instance," is but a partial and unreal way of looking at it, and that mind in truth is the unity of subject and object, one of which cannot be subtracted from the other, because it has absolutely no existence without the other. Is it not a self-contradiction to declare that the "scope of mental science" is subject consciousness or mind, and at the same time to declare that "both subject and object are parts of our being," are but "two kinds" of consciousness? Surely Psychology ought to be the science of our whole being, and of the whole consciousness. But no words can make the contradiction clearer than the mere statement of it. The only possible hypothesis upon which to reconcile the two statements that mind is consciousness with the object world subtracted, and that it

is the whole of our conscious experience, including both subject and object world, is that the term Mind is used in two entirely different senses in the two cases. In the first it must be individual mind, or consciousness, and in the second it must be absolute mind or consciousness, for and in which alone the individual or subject consciousness and the external world or object consciousness exist and get their reality.

The root of the whole difficulty is this. It is the business of Psychology to take the whole of conscious experience for its scope. It is its business to determine within this whole what the nature of subject and object are. Now Subjective Idealism identifies at the outset, as may be seen in the passages quoted, subject with "Mind," "*Ego*," and object with "Matter," "*Non-Ego*," "External World," and then goes on to hold that the 'scope' of Psychology is the former only. In short, the psychological standpoint, according to which the nature of subject and object was to be determined from the nature of conscious experience, was abandoned at the outset. It is presumed that we already know what the "subject" is, and Psychology is confined to treatment of that. It is assumed that we know already what the 'object' is, and Psychology is defined by its elimination. This method, as psychology, has two vices. It is 'ontological,' for it sets up some external test to fix upon the nature of subject and object; and it is arbitrary, for it dogmatically presupposes the limitation of Psychology to a series of subjective states. It assumes that Psychology instead of being the criterion of all, has some outside criterion from which its own place and subject-matter is determined, and more specifically, *it assumes that the standpoint of Psychology is necessarily individual or subjective*. Why should we be told that the scope of Psychology is subject consciousness, and subject consciousness be defined as the totality of conscious experience *minus* the object world, unless there is presupposed a knowledge of what subject and object are? How different is the method of the true psychological standpoint! It shows how subject and object arise within conscious experience, and thereby develops the nature of consciousness. It shows it to be the unity of subject and object. It shows therefore that there cannot be "two kinds" of consciousness, one subject, the other object, but that all consciousness whether of "Mind," or of "Matter" is, *since* consciousness, the unity of subject and object. Consciousness may, and undoubtedly does, have two aspects—one aspect in which it appears as an individual, and another in which it appears

as an external world over against the individual. But there are not two kinds of consciousness, one of which may be subtracted from the whole and leave the other. They are but consciousness in one phase, and how it is that consciousness assumes this phase, how it is that this division into the individual and the external world arises for consciousness (in short, how consciousness in one stage appears as perception),—that is precisely the business of Psychology to determine. But it does not determine it by assuming at the outset that the subject is “me,” and the object is the world. And if this be not assumed at the outset it certainly will not be reached at the conclusion. The conclusion will show that the distinction of consciousness into the individual and the world is but one form in which the *relation* of subject and object, which everywhere constitutes consciousness, appears. This brings us definitely to the relation of the individual and the universal consciousness.

III.

We have seen that the attempt to account for the origin of knowledge, at bottom, rests on the undoubted fact that the individual consciousness does become, but also that the only way to account for this becoming, without self-contradiction, is by the postulate of a universal consciousness. We have seen again that the truth at the bottom of subjective idealism is the undoubted fact that all existence is relative to our consciousness, but also that the only consistent meaning of this fact is that our consciousness as individual is itself relative to a universal consciousness. And now I am sure that my objector, for some time silent, will meet me with renewed vigour. He will turn one of these arguments against the other and say: ‘After all, this consciousness for which all exists is your individual consciousness. The universal consciousness itself exists only for it. You may say indeed that this individual consciousness, which has now absorbed the universal again, shows the universal as necessary to its own existence, but this is only to fall into the contradiction which you have already urged against a similar view on the part of Subjective Idealism. Your objection in that case was that consciousness divided into subject consciousness and object consciousness, of which the former immediately absorbed the latter, and again subdivided itself into the subject and object consciousness. You objected that this was the express statement of a contradiction—the statement that the subject consciousness was and was not the whole of conscious ex-

perience. It was only as it was asserted to be the whole that any ground was found for subjective idealism ; but only as it was regarded as a remainder left over from subtraction of the object world does it correspond to actual experience. Now you have yourself fallen into precisely this contradiction. You do but state that the individual consciousness is and is not the universal consciousness. Only so far as it is not, do you escape subjective idealism ; only so far as it is, do you escape the thing-in-itself. If this universal consciousness is not for our individual consciousness, if it is not a part of our conscious experience, it is unknowable, a thing-in-itself. But if it be a part of our individual consciousness, then after all the individual consciousness is the ultimate. By your own argument you have no choice except between the acceptance of an unknowable unrelated reality or of subjective idealism.'

This objection amounts to the following disjunction: Either the universal consciousness is the individual and we have subjective idealism ; or, it is something beyond the individual consciousness, and we have a thing-in-itself. Now this dilemma looks somewhat formidable, yet its statement shows that the objector has not yet put himself upon the psychological ground : there is something of the old 'ontological' man left in him yet, for it assumes that he has, prior to its determination by Psychology, an adequate idea of what 'individual' is and means. If he will take the psychological standpoint, he will see that the nature of the individual as well as of the universal must be determined within and through conscious experience. And if this is so, all ground for the disjunction falls away at once. This disjunction rests upon the supposition that the individual and the universal consciousness are something opposed to each other. If one were to assert that the meaning of the individual consciousness is that it is universal, the whole objection loses not only its ground but its meaning ; it becomes nonsense. But I am not concerned just at present to state this ; I am concerned only to point out that, if one starts with a presupposition regarding the nature of the individual consciousness, one is leaving the psychological standpoint. In forming the parallel between the position attributed to the writer and that of subjective idealism, the supposed objector was building wiser than perhaps he knew. The trouble with the latter view is that it supposes that consciousness may be divided into "two kinds," one subjective, the other objective ; that it presupposes, at the start, the nature of subject and object. The fact of the case is that, since

consciousness is the unity of subject and object, there is no purely subjective or purely objective. So here. It is presupposed that there are "two kinds" of consciousness, one individual, the other universal. And the fact will be found to be, I imagine, that consciousness is the unity of the individual and the universal; that there is no purely individual or purely universal. So the disjunction made is meaningless. But however that may be, at all events it leaves the psychological basis, for it assumes that the nature of the individual is already known.

This has been said that it may be borne in mind from the outset that Psychology must determine within consciousness the nature of the individual and the universal consciousness, thereby determining at once their place within experience, and explicating the nature of consciousness itself. And this, stated in plain terms, means simply that, since consciousness does show the origin of individual and universal consciousness *within itself*, consciousness is therefore both universal and individual. *How* this is, the present article, of course, does not undertake to say. Its more modest function is simply to point out that it is the business of psychology to show the nature of the individual and the universal and of the relation existing between them. These must not be presupposed, and then imported bodily to determine the nature of psychologic experience. There has now been rendered explicit what was implied concerning the psychological standpoint from the first, *viz.*, that it is a universal standpoint. If the nature of all objects of philosophical inquiry is to be determined from fixing their place within conscious experience, then there is no criterion outside of or beyond or behind just consciousness itself. To adopt the psychological standpoint is to assume that consciousness itself is the only possible absolute. And this is tacitly assumed all the while by subjective idealism. The most obvious objection to subjective idealism is, of course, that it presupposes that, if "mind were to become extinct, the annihilation of matter, space, time would result". And the equally obvious reply of subjective idealism is: "My conception of the universe even though death may have overtaken all its inhabitants, would not be an independent reality, I should merely take on the object-consciousness of a supposed mind then present" (Bain, p. 682). In short, the reality of the external world, though I should imagine all finite minds destroyed, would be that I cannot imagine consciousness destroyed. As soon as I imagine an external world, I imagine a consciousness in relation to which it exists. One may put the objection

from a side which gets added force with every advance of physical science. The simplest physiology teaches that all our sensations originate from bodily states—that they are conditioned upon a nervous organism. The science of biology teaches that this nervous organism is not ultimate but had its origin ; that its origin lies back in indefinite time, and that as it now exists it is a result of an almost infinite series of processes ; all these events, through no one knows how much time, having been precedent to your and my mind, and being the condition of their existence. Now is all this an illusion, as it must be, if its only existence is for a consciousness which is “ but a transition from one state to another ” ? The usual answer to this argument is that it is an *ignoratio elenchi* : that it has presupposed a consciousness for which these events existed ; and that they have no meaning except when stated in terms of consciousness. This answer I have no call to rebut. But it must be pointed out that this is to suppose the individual consciousness capable of transcending itself and assuming a universal standpoint—a standpoint whence it can see its own becoming, as individual. It is this *implication* of the universal nature of the individual consciousness which has constituted the strength of English philosophy ; it is its lack of *explication* which has constituted its weakness. Subjective idealism has “ admitted of no answer and produced no conviction ” because of just this confusion. That which has admitted of no answer is the existence of all *for* consciousness ; that which has produced no conviction is the existence of all for our consciousness as merely individual. English philosophy can assume its rightful position only when it has become fully aware of its own presuppositions ; only when it has become conscious of that which constitutes its essential characteristic. It must see that the psychological standpoint is necessarily a universal standpoint and consciousness necessarily the only absolute, before it can go on to develop the nature of consciousness and of experience. It must see that the individual consciousness, the consciousness which is but “ transition,” but a process of becoming, which, in its primary aspect, has to be defined by way of “ contrast,” which is but a “ part ” of conscious experience, nevertheless is when viewed in its finality, in a perfectly concrete way, the universal consciousness, the consciousness which has never become and which is the totality ; and that it is only because the individual consciousness is, in its ultimate reality, the universal consciousness that it affords any basis whatever for philosophy.

The case stands thus : We are to determine the nature of everything, subject and object, individual and universal, as it is found within conscious experience. Conscious experience testifies, in the primary aspect, my individual self is a "transition," is a process of becoming. But it testifies also that this individual self is conscious of the transition, that it knows the process by which it has become. In short, the individual self can take the universal self as its standpoint, and thence know its own origin. In so doing, it knows that it has its origin in processes which exist for the universal self, and that therefore the universal self never has become. Consciousness testifies that consciousness is a result, but that it is the result of consciousness. Consciousness is the self-related. Stated from the positive side, consciousness has shown that it involves *within* itself a process of becoming, and that this process becomes conscious of itself. This process is the individual consciousness ; but, since it is conscious of itself, it is consciousness of the universal consciousness. All consciousness, in short, is self-consciousness, and the self is the universal consciousness, for which all process is and which, therefore, always is. The individual consciousness is but the process of realisation of the universal consciousness through itself. Looked at as process, as realising, it is individual consciousness ; looked at as produced or realised, as conscious of the process, that is, of itself, it is universal consciousness.

It must not be forgotten that the object of this paper is simply to develop the presuppositions which have always been latent or implicit in the psychological standpoint. What has been said in the way of positive result has been said, therefore, only as it seemed necessary to develop the meaning of the standpoint. It must also be remembered that it is the work of Psychology itself to determine the exact and concrete relations of subject and object, individual and universal within consciousness. What has been said here, if said only for the development of the standpoint, is therefore exceedingly formal. To some of the more concrete problems I hope to be able to return at another time.

II.—MEISTER ECKEHART, THE MYSTIC.

By Prof. KARL PEARSON.

Diz ist Meister Eckehart
Dem Got nie niht verbarc.
—*Old Scribe.*

STUDENTS of mediæval philosophy must often have been struck by the unexpected occurrence of phases of thought, even in Christian writers, which are utterly out of keeping with the framework of Scholastic theology within which they are usually mounted. M. Renan has done excellent service in showing how many of these eccentricities may be attributed to the influence—the fascination—of the arch-heretic Averroes. There is however one field of Averroistic influence to which M. Renan has only referred without entering on any lengthened discussion: this is the extremely interesting, but undoubtedly obscure subject of fourteenth century mysticism. I purpose in the following paper to present the English reader with a slight sketch of the philosophical (or rather theosophical) system of Meister Eckehart, the Mystic,¹ who may be accepted as the chief exponent of the school. There are two points which ought peculiarly to attract the student of modern philosophy to Eckehart: the first lies in a possible (and by no means improbable) influence which his ideas may have exercised over Kant; the second consists in a peculiar spiritual relation to Spinoza. This latter can be in no way due to direct contact, but has to be sought in a common spiritual ancestry. Nor is this link in the past by any means difficult to find. The parallelism of ideas in the writings of Averroes and Maimonides has led some authors hastily to conclude an adoption by the latter of the ideas of the former. The real relation is a like education under the influences of the same Arabian school. On the one hand Maimonides was the spiritual

¹ The Germans possess an excellent book on Eckehart from the pen of Prof. Lasson, but, for the purposes of this essay, I have made use only of Eckehart's own writings in the second volume of Pfeiffer's *Deutsche Mystiker*. That my results differ so often from those of Prof. Lasson is due principally to his strong Hegelian standpoint; at the same time I have to acknowledge the debt which I owe, not so much to his book, as to the charm of his personal teaching. English readers will find a short account of Eckehart due to Prof. Lasson in Ueberweg's *History of Philosophy*.

progenitor of Spinoza; on the other Averroes was the master from whom fourteenth century German mysticism drew its most striking ideas. During this century Averroism was the ruling philosophical system at both the leading European universities,—at Paris and at Oxford. It was the result of Averroistic teaching which produced two of the most characteristic thinkers of the age. The theologico-philosophical system which John Wyclif, the Oxford professor, develops in his *Triologus* is unintelligible without a knowledge of Averroistic ideas. The mysticism of Eckehart, the far-famed Paris lecturer, owes its leading characteristics to a like source. In 1317 the then Bishop of Strasburg condemned Eckehart's doctrines; in 1327 the Archbishop and Inquisitors of Cologne renewed the condemnation, and Eckehart recanted; in 1329, a year after Eckehart's death, a papal bull cited 28 theses of the master and rejected them as heretical. What a parallel does this offer to the proceedings of the hierarchy against Wyclif, culminating in his posthumous condemnation by the Council of Constance! Yet what more natural, when both men were deeply influenced by the ideas of the arch-heretic Averroes, whom later Christian art was to place alongside Judas and Mahomet in the darkest shades of hell?¹

Wyclif and Eckehart each in their individual fashion represent the Averroistic ideas under the garb of Christian Scholasticism; in strange contrast with these thinkers we find in Spinoza the like ideas treated with a rationalism, which, however, has not yet quite freed itself from the idealistic influence of Hebrew theosophy. The contrast is one possibly as interesting and instructive as could well be found in the whole history of the development of human thought.

Before entering upon a discussion of Eckehart's ideas, it may not be out of place to recall those features of Averroism with which we shall be principally concerned, and at the same time to prove by citations from a remarkable tractate of an anonymous writer of the 14th century the direct connexion of Averroistic thought with German mysticism.

Aristotle in his *De Anima* (III. v. 1) distinguishes in man a double form of reason, the active and the passive: the first is separated from the body, eternal, and passionless; the

¹ A further link between Eckehart and Wyclif is perhaps to be found in the Pseudo-Dionysius with his commentator Grossetête. Eckehart was acquainted with "Lincolniensis" (*Deutsche Mystiker*, ii. 363), whom Wyclif regarded as peculiarly his own precursor.

second begins and ends with the body and shares all its varied states. Unfortunately Aristotle has nowhere clearly explained what he understands by the relationship of these two reasons, and, as Zeller remarks (*Die Philos. der Griechen*, ii. Abth., 2. Theil, p. 572), it is not possible to reconcile his various statements by any consistent theory. Alexander of Aphrodisias endeavoured to obtain such a consistent theory by seeking the active reason not in the human soul, but in the divine spirit. This view, although probably not the interpretation Aristotle would have given of his own statements, is yet eagerly adopted by the Arabian commentators, and the comparatively insignificant distinction made by Aristotle becomes with Averroes the basis of all that is original in his ideas.

While Alexander identifies the active reason or intellect, which brings the images (*φαντάσματα*) before the passive intellect, with the divine spirit, Averroes looks upon it as emanating from the last celestial intelligence. He considers, however, with Alexander that it is possible for the human or passive intellect to unite itself to the purely active intellect. This union takes place, this perfection or blessedness is attained, by long study, deep thought and renunciation of material pleasures. This process, consisting in the widening of human knowledge, is the *religion* of the philosopher. For what worthier cult can man offer to God than the knowledge of his works, through which alone he can attain to a knowledge of God himself in the fulness of his essence? ¹

But to recognise fully what is original in Eckehart we must examine Averroes's views somewhat closer.

Averroes holds that things perceived by the understanding (*intelligibilia*) stand in the same relation to the material intellect (passive reason) as things perceived by sensation bear to the faculty of sensation. This faculty is purely receptive, and pure receptivity belongs also to the material intellect. Its nature is only *in potentia*,—it is a capacity for intellectual perception. At this point Averroes introduces a statement which disagrees with Aristotle and brings obscurity into his theory; he holds that, as this passive reason exists only *in potentia*, it can neither come into being nor perish. Alexander's view, that the material intellect is perishable, is described as utterly false.² This statement was probably

¹ Cp. *Drei Abhandlungen über die Conjunction des separaten Intellects mit dem Menschen von Averroes*, herausgegeben von T. Herz, Berlin, 1869.

² *Ibid.*, p. 23.

introduced to quiet the scruples of the theologians, which would be excited by anything appearing to destroy individual immortality. The like inconsistency recurs with Eckehart. Three premisses of Alexander are stated by Averroes to prove how in the course of time it is possible for the material to attain perfection through the separate intellect. In accordance with these premisses (which are based on the analogy mentioned above of the intellective and sensitive faculties) we ought to conclude that some portion of mankind can really contemplate the separate intellect, and these men are they who by the speculative sciences have perfected themselves. Perfection of the spirit is thus to be obtained by Knowledge, nor can it ever again be lost. Often however it comes only in the moment of death, since it is opposed to bodily (material) perfection.

The separate intellect (active reason) exercises two activities. The one, because it is separate, consists in self-contemplation or self-perception. This self-perception is the manner of all separate intellects, because it is characteristic of them that the intellectual and the intelligible are absolutely one. The second activity is the perception of the *intelligibilia* which are in the material intellect, that is, the transition of the material intellect from possibility to actuality. Thus the active intellect attaches itself to man and is at the same time his *form*, and the man becomes by means of it active, that is, he thinks. These statements can hardly be said to be free from obscurity, but they receive considerable light from Eckehart, who identifies the active reason with the Deity, and explains the life of the universe by his two activities: self-contemplation, wherein to think is to create or act, and human contemplation which is the "bearing of the Son".

The question now arises as to what follows upon the complete union of the separate and individual intellects. What happens to the man for whom there no longer remains any *intelligibile in potentia* to convert into an *intelligibile in actu*? Such an individual intellect then becomes in character like to the separate intellect; its nature becomes pure activity; its self-consciousness is like that of the separate intellect, in which existence is identified with its purpose—uninterrupted activity. This statement Averroes holds to be the most important that can be made concerning the intellect.

While Eckehart himself makes no direct reference to Averroes, a remarkable tractate written by one of his school does not hesitate to cite the Arabian commentator as an

authority.¹ A short sketch of the views contained in this tractate will serve to link more clearly the preceding statement of Averroes's theory with our sketch of Eckehart's theosophy.

The writer quotes Meister Eckehart to the effect that when two things are united one must suffer and the other act. For this reason human understanding must suffer the "moulding of God" (*überformunge Gotz*). Since God's existence is his activity, the blessedness of this union can only arise from the human understanding remaining in a purely passive, receptive state. Only a spirit free from all working of its own can suffer the "reasonable working" of God (*daz vernunftige werch Gotz*). The writer, after describing the soul as a spark of the divine spirit, declares that the union of this spark with God is possible, and that the process of union is "God confessing himself, God loving himself, God using himself"—a phraseology which is characteristic of Eckehart and suggestive of Spinoza. After these theosophical considerations, the tractate passes to the more philosophical side of the subject. There are two kinds of reason, an active reason and a potential reason (*ein wurchende vernunft* and *ein möglich vernunft*). The latter is possessed by the spirit at the instant when it reaches the body. If the potential reason would simply subject itself to the active reason, the man would be as blessed in this world as in the eternal life, for "the blessedness of man consists in his recognition of his own existence under the form of the active reason". That is, it consists in contemplation of the individual essence in its connexion with and origin in the universal reason. The complete capacity for understanding all things which this implies is not possible to the potential reason. The potential reason has only the capacity for receiving the moulding of the active reason.

There are certain beings whose existence is their activity and whose activity is their understanding. In other words, to be, to act and to think are one and the same process with them—(their *wesen*, *wirken* and *verstehen* are one). These beings are termed intelligences and are nobler than the angels; they flow reasonably (*vernunftlichlich*) and incessantly from and to God, the uncreated substance. They belong, as it were, to the divine flow of thought (which is at

¹ *Philosophischer Tractat von der wirklichen und möglichen Vernunft aus dem vierzehnten Jahrhundert*. This was printed by B. J. Docen in his *Miscellaneen zur Geschichte der deutschen Literatur*, München, 1809: i. s. 138.

the same time active creation) and so are not substances like the angels. Such an intelligence is the active reason (pp. 146-7). As proof that this particular intelligence is no substance, but its existence is its activity, Averroes's commentary on *De Anima* iii. is quoted as authority. The potential reason is filled with images (*bilde*) which are for it externality and temporality. So soon as by the grace of God the potential reason is freed from these images, it is supplanted or moulded by the active reason. Whereas the potential reason takes things only from the senses as they appear to exist, the active reason goes to the origin of things and sees them as they are in reality—that is, in God. But our writer is again hampered by the current theological conceptions, although he twists them to his own theories: if the active reason is ever present ready to be united to the potential reason, when once it is freed of the images, must it not also be present in hell? The answer must necessarily be affirmative; but hell in truth is not what the vulgar (*grobe lute*) believe it—fire; the agony of hell consists in the sufferer's unconsciousness of his own reason (*irre eigen vernunft*); that is, he cannot contemplate himself as he appears to the active reason, or as he exists in the divine mind. This spiritual pain is the greatest of all pains. Hell is thus identified with the absence of the higher insight. Finally we may note that the author of the tractate seems uncertain whether the potential reason can ever arrive at perfect union with the active reason before it is separated from all material things.

Distorted as are the ideas of Averroes in this work, we cannot doubt that it is those ideas which are influencing its author. A far more complete attempt to reconcile Averroism with Christian theology is to be found in the system of Eckehart, to which we now proceed. Many difficulties and obscurities will arise, but some elucidation they will undoubtedly receive from a brief examination of the relationship of Averroes to mediæval mysticism.

We shall be the better able to enter into Meister Eckehart's system, if we first note a few leading characteristics of his intellectual standpoint. Running throughout his writings two strangely different theosophical currents may be discerned—two currents which he fails entirely to harmonise, and which account, for the most part, for those inconsistencies wherein he abounds. On the one hand, his mental predilection is towards a pantheistic idealism; on the other, his heart makes him a gospel, his education a Scholastic, Christian. He speaks of God almost in the

terms of Spinoza, and describes the phenomenal world in the language of Kant ; but his theory of the *esse intelligibile* is identical with Wyclif's, while he states the doctrines of renunciation and of the futility of human knowledge in the form at least of primitive Christianity. Is it to be wondered at that the deepest thinker among the German mystics is the least intelligible? He is the focus from which spread the ever-diverging rays of many mediæval and modern philosophical systems. For our purpose it is first necessary to obtain some conception of the relation which Eckehart supposed to exist between the phenomenal world and God. According to our philosopher the active reason (*die wirkende vernunft*) receives the impressions from external objects (*äusserndikeit*) and places them before the passive reason (*die liddende vernunft*). These impressions or perceptions as presented by the active reason are formulated in space and time, have a 'here and a now' (*hie unde nû*). Man's knowledge of objects in the ordinary sense is obtained solely by means of these impressions (*bilde*), he perceives things only in time and space. (Pfeiffer, *Deutsche Mystiker*, ii., 17, 19, 143, &c.) Of an entirely different character from human knowledge is the divine knowledge. While the active reason must separate its perceptions in time and space, the Deity comprehends all things independently of these perceptual frameworks. The divine mind does not pass from one object to another, like the human mind, which can only concentrate itself on one object at a time to the exclusion of all others. It grasps all things in one instant and in one point (*alle mîtenander in eime blicke und in eime punte*.—*Ib.*, 20 ; cp. 14-15). Shortly, in the language of Kant, while the human intellect reaches only the world of sense, the divine is busied with the *Dinge an sich*. This higher knowledge is of course absolutely unintelligible to the human reason. "All the truth which any master ever taught with his own reason and understanding, or ever can teach till the last day, will not in the least explain this knowledge and its nature" (*Ib.*, 10). Shortly, the *Dinge an sich* form the limit of the human understanding.¹ But, just as Kant causes the practical reason to transcend this limit, so Meister Eckehart allows a mystical revelation or implantation of this higher knowledge ; this process he terms the eternal birth (*die ewige geburt*). The soul ceasing to see things under the forms of time and space grasps them as they exist in the mind of God, and

¹ Cp. *Kritik der reinen Vernunft*, Elementarlehre, ii. Th., 1 Abth., 2 Buch., 3 Hauptst.

finds therein the ultimate truth, the *reality*, which cannot be reached in the phenomenal world (*Ib.*, 12). The world as reality is thus the world as it exists in God's perception; but, since God's will and its production are absolutely identical (there being no distinction between the moulding and the moulded—*entgiezunge und entgozzenheit*), we arrive at the result that the world as reality is the world as *will*. Thus both Eckehart and Kant find it necessary to transcend the 'limit of the human understanding'; both find reality in the world as *will*.¹ The critical philosopher is desirous of finding an absolute basis for morality in the supersensuous, and accordingly links phenomena and the *Dinge an sich* by a transcendental causality, which somehow bridges the gulf. The fourteenth century mystic, desirous of raising the idea of God from the contradictions of a sensuous existence, places the Deity entirely beyond the field of ordinary human reason. In order to restore God again to man, he postulates a transcendental knowledge; in order to show God as ultimate cause even of the phenomenal, he is reduced to interpreting in a remarkable manner the chief Christian dogma. We shall see the meaning of this more clearly if we examine more closely the conception Eckehart had formed of God and his relation to the *Dinge an sich* (*vorgëndiu bilde*, or 'prototypes' as we may perhaps translate the expression).

Things-in-themselves are things as they exist free from space and time in God's perception. (*D. M.*, ii. 325, &c.) Thus the prototype (*vorgëndez bild*) of Eckehart corresponds to the *esse intelligibile* of Wyclif, who in like manner identifies God's conception and his causation (*Omne quod habet esse intelligibile, est in Deo, and Deus est æque intellectivus, ut est causativus, &c. Trialogus*, ed. Lechler, pp. 46-48.).² This form in God is evidently quite independent of creature-existence and not bound by time or space, cannot be said to have been created, cannot be said to come into or go out of existence. The form is in an 'eternal now' (*daz ewige nû*). To describe a temporal creation of the world is folly to the intelligent man; Moses only made use of such a description to aid the ignorant. God creates all things in an 'ever-present now' (*in eime gegenwürtigen nû. D. M.*, ii. 266, and

¹ This principle, usually identified with the *Grober Philosoph*, is clearly expressed in the *Kritik der praktischen Vernunft*, i. Theil., 1 B., 3 Hauptst. The will however with Kant and Eckehart is different in character.

² This is absolutely identical with Spinoza, *Ethica*, i. 16, *Omnia quæ sub intellectum infinitum cadere possunt, necessario sequi debent. Cp. Prop. 17, Scholium.*

7).¹ The soul then which has attained to the higher knowledge grasps things in an 'eternal now,' or, as we may express it, *sub specie aeternitatis*. We can now grasp more clearly Eckehart's pantheistic idealism. By placing all reality in the supersensuous and identifying that supersensuous reality with God, he avoids many of the contradictions of pantheistic materialism. God is the substance of all things (*Ib.*, 163), and in all things, but as the reality of things has not existence in space or time there can be no question as to how the unchangeable can exist in the phenomenal (*Ib.*, 389). Since all things are what they are owing to the peculiarity of God's nature, it follows that the individual though a work of God is yet an essential element of God's nature, and may be looked upon as productive with God of all being (*Ib.*, 581). The soul then which has attained the higher knowledge sees itself in its reality as an element of the divine nature; it obtains a clear perception of its own uncreated form (or *vorgêndez bild*) which is in reality its life; it becomes one with God. The will of the individual henceforth is identical with the will of God: and the Holy Ghost receives his essence or proceeds from the individual as from God (*dâ enpfâhet der Heilig Geist sîn wesen unde sîn werk unde sîn werden von mir als von Gote. Ib.*, 55). The soul stands to God in precisely the same relation as Christ does; nay, it attains to "the essence, and the nature, and the substance, and the wisdom, and the joy, and all that God has" (*Ib.*, 41, 204). "Have I attained this blessedness, so are all things in me and in God (*secundum esse intelligibile?*), and where I am, there is God" (*Ib.*, 32). From this it follows that the 'higher knowledge' of the soul and God's knowledge are one.² It is scarcely necessary to remark that Eckehart defines this state of 'higher knowledge' as blessedness. Thus both Spinoza and Eckehart base their beatitude on the knowledge of God, but in how

¹ Cp. Wyclif's *Omne quod fuit vel erit, est*, which is based upon the conception that things *secundum esse intelligibile* are ever in the time- and space-free cognition of the Deity. *Triologus*, ed. Lechler, p. 53.

² The whole of this may be most instructively compared with Spinoza's *Ethica*, v. Prop. 22: In Deo tamen datur necessario idea (Eckehart's *vorgêndez bild*), quæ hujus et illius corporis humani essentiam (Eckehart's *âzewendiges ding*) sub æternitatis specie exprimit.

Prop. 23: Mens humana non potest cum corpore absolute destrui; sed ejus aliquid remanet, quod æternum est (the *vorgêndez bild* exists in an *éwige nå*).

Prop. 29: Quicquid mens sub specie æternitatis intelligit, id ex eo non intelligit, quod corporis præsentem actualem existentiam concipit; sed ex eo, quod corporis essentiam concipit sub specie æternitatis. (The

different a sense! Eckehart's knowledge is a kind of transcendental instinct of the soul steeped in religious emotion; Spinoza's knowledge is the result of an adequate cognition of the essence of things—it is a purely intellectual (non-transcendental) process. A striking corollary to this similarity may be found in the two philosophers' doctrines of God's love. The love of the mind towards God, writes Spinoza (*Ethica* v. 36 and Cor.), is part of the love where-with God loves himself, and conversely God in so far as he loves himself, loves mankind. The love of God towards men, says Meister Eckehart, is a portion of the love with which he loves himself (*D. M.*, ii. 145-6, 180).

In both cases God's self-love is intellectual—it arises from the contemplation of his own perfection.¹ Eckehart perhaps even more strongly than Spinoza endeavours to free God from anthropomorphical qualities. His God, placed in the sphere of *Dinge an sich*, is freed from extension, but this by no means satisfies him—God must have no human attributes; he is not lovable, because that is a sensuous quality—he is to be loved because he is not lovable. Nor does he possess any of the spiritual powers such as men speak of in the phenomenal world—nothing like to human will, memory or intellect; in this sense he is not a spirit. He is nothing that the human understanding can approach. One attribute only can be asserted of him and of him only—namely, unity. Otherwise he may be termed the nothing of nothing, and existing in nothing. Alone in him the prototypes or uncreated forms (*vorgëndiu bilde*) can be said to exist, but these are beyond the human understanding and can only be reached by the higher transcendental knowledge. "How shall I love God then? Thou shalt love him as he is, a non-god, a non-spirit, a non-person, a non-form; more, as he is an absolute pure clear one." (*Wie sol ich in denne minnen? Dû solt in minnen als er ist, ein nihtgot, ein nihtgeist, ein nihtpersône, ein nihtbild: mér als er ein bäter pâr klar ein ist, &c.*

'higher knowledge' of the soul is concerned with the *vorgëndez bild* and not with the phenomenal world.)

Prop. 30: Mens nostra, quatenus se et corpus sub æternitatis specie cognoscit, eatenus Dei cognitionem necessario habet, scitque se in Deo esse et per Deum concipi—(a proposition agreeing entirely with Eckehart's).

After this it is hard to deny a link somewhere between these two philosophers!

¹ Wyclif, *Dialogus*, 56: *Cognoscit et amat se ipsum*. Wyclif's whole theory of the divine intellect as the sphere of reality, and cognition by God as the test of possible existence, has strong analogy to Eckehart.

Ib., 320 ; cp. 319, 500, 506, &c.). Into this inconceivable nothing the soul finds its highest beatitude in sinking. How is this to be accomplished ? What is the phenomenal world, and how can the passage be made to the world of reality ? What is the price to be paid for this surpassing joy ? These are the questions which now rise before us and which Eckehart endeavours to solve in his theory of renunciation.

All important is it first to note how the philosopher deduces the phenomenal from the real : the externality (*ûzewendikeit*) from the prototypes (*diu vorgêndiu bilde*). The solution of this apparent impossibility is found in a singular interpretation of the Christian mystery—The Word became flesh ; the idea in God passing into phenomenal being is the incarnation of the divine λόγος. God's self-introspection, his "speaking" of the ideas in him produces the phenomenal world. "What is God's speaking ? The Father regards himself with a pure cognition, and looks into the pure oneness of his own essence. Therein he perceives the forms of all creation (*i.e.*, *diu vorgêndiu bilde*), then he speaks himself. The Word is pure (self-) cognition, and that is the Son. God speaking is God giving birth." The real world in the divine mind is "non-natured nature" (*diu ungenâtûrte nâtûre*) ; the sensuous world which arises from this by God's self-introspection is "natured nature" (*diu genâtûrte nâtûre*).¹ In the former we find only the Father, in the latter we first recognise the Son (*D. M.*, ii., 591, 537, 250.) Of course this process of "speaking the word" or giving birth to the Son is not temporal but in an eternal now, but we had better let Eckehart speak for himself :—"Of necessity God must work all his works. God is ever working in one eternal now and his working is giving birth to his Son ; he bears him at every instant. From this birth all things proceed and God has such joy therein, that he consumes all his power in giving birth (*daz er alle sine maht in ir verzert*). God bears himself out of himself into himself ; the more perfect the birth, the more is born. I say : God is at all times one, he takes cognition of nothing beyond himself. Yet God, in taking cognition of himself, must take cognition of all creatures. God bears himself ever in his Son ; in him he speaks all things" (*Ib.*, 254). Eckehart in identifying God's self-introspection with the birth of the Son, and the "phenomenalising" of the real has rendered it extremely difficult to reconcile this

¹ These are in close agreement with Spinoza's *natura naturans* and *natura naturata*. Cp. *Ethica* i., Prop. 29, Schol.

divine process in the *ewige nå* with the historical fact of Christianity. The difficulty is still further increased when we remember that the converse process by which the individual soul passes from the phenomenal to the higher or divine knowledge is also termed by Eckehart "God bearing the Son". The difficulty is lightened, though not removed, by uniting the two processes. The soul may be compared to a mirror which reflects the light of the sun back to the sun. In God's self-introspection the real is "phenomenalised" (as the light passes from the sun to the mirror); but the soul in its higher knowledge passes again back to God, the phenomenal is realised (as the light is reflected back to the sun). The whole process is divine—"God bears himself out of himself into himself" (*Ib.*, 180-181). Logically, the process ought to occur with every conscious individual, for all have a like phenomenal existence. In order, however, to save at least the moral, if not the historical, side of Christianity, Eckehart causes only certain souls to attain the higher knowledge; the Son is only born in certain individuals destined for salvation. Thus Eckehart's phenomenology is shattered upon his practical theology; it is but the recurrence of an old truth, that all forms of pantheism (idealistic or materialistic) are inconsistent with the assertion of an absolute morality as fundamental principle of the world. The pantheist must boldly proclaim that morality is the creation of humanity, not humanity the outcome of any moral causality.¹

Let us now observe how the soul is to pass from the world of phenomena to the world of reality. So long as the active reason continues to present external objects to the soul, the soul cannot possibly grasp those objects *sub æternitatis specie*. The human understanding which can only perceive things in time and space is useless in this matter, nay, it is even harmful; the soul must try to attain absolute ignorance and darkness (*ein dunsternüsse und ein unwizzen*, *D. M.*, ii. 26). Eckehart's contempt for the creature-intellect is almost on a par with Tertullian's and is in marked contrast with the fashion in which Gautama, Maimonides and Spinoza make it the guiding star through renunciation to beatitude. The first step to the eternal birth (*ewige gebärt*) is the total renunciation of creature-perception and creature-reason. The soul must pass through a period of absolute unconsciousness as to the phenomenal world; all its powers

¹ That the world was created for the moral perfecting of mankind is a dogma alike with Kant and Averroes (*Drei Abhandlungen*, p. 63). It has been wisely repudiated by Spinoza and Maimonides.

must be concentrated on one object, the mystical contemplation of the supersensuous deity,—the ‘nothing of nothing,’ of which the soul, if it seeks for true union cannot and *must* not form any idea (*Ib.*, 13-15). Not by an intellectual development, but by sheer passivity, by waiting for the transcendental action of God can the soul attain the higher knowledge, pass through the eternal birth. This intellectual nihilism, this ignorance, is not a fault, but the highest perfection; it is the only step the mind can take towards its union with God (*Ib.*, 16). The soul must so far as in it lies, separate itself from the phenomenal world, renounce all sensuous action, even cease to think under the old forms. Then, when all the powers of the soul are withdrawn from their works and conceptions (*von allen irdn werken und bilden*), when all creature-emotions are discarded, God will speak his word, the Son will be born in the soul (*Ib.*, 6-9). This renunciation of all sensational existence (*alle zewendikeit der creaturen*) is an absolutely necessary prelude to the re-birth (*wige gebrt*, *Ib.*, 14). Memory, understanding, will, sensation, must be thrown aside; the soul must free itself from here and from now, from matter and from manifoldness (*lplichkeit unde manichfaltigkeit*). Poor in spirit and having nothing, willing nothing and knowing nothing, even renouncing all outward religious works and observances, the soul awaits the coming of God (*Ib.*, 24-25, 143, 296, 309, 280). Then arrives the instant when, as by a transcendental process the higher knowledge is conveyed to the soul, it attains its freedom by union with God. Henceforth God takes the place of the active reason, and is the source whence the passive reason draws its conceptions. The soul is no longer bound by matter and time; it has transcended these limits and grasped the reality beyond. Everywhere the soul sees God, as one who has long gazed on the sun sees it in whatever direction he turns his glance (*Ib.*, 19, 28-29). Such is the beatitude which follows the re-birth (*wige gebrt*). “Holy and all holy are they, who are thus placed in the eternal now beyond time and place and form and matter, unmoved by body and by pain and by riches and by poverty” (*Ib.*, 75). Strange is this emotional Nirvna of the German mystic, though it is a religious phenomenon not unknown to the psychologist (or often fitter study for the physiologist). This emotional Nirvna, or seclusion (*Abgeschiedenheit*, *Ib.*, 486-7) as Eckehart calls it, is pronounced to have exactly the same results as the intellectual beatitude of Gautama and Spinoza. The soul has returned to the state

in which it was before entering the phenomenal world ; it has recognised itself as idea in God and thrown off all creature-attributes (*creätürlichkeit*), the remaining in which is what Eckehart understands by hell ; it sees everything *sub specie æternitatis*. Secluded from men, free from all external objects, from all chance, distraction, trouble, it sees only reality. To all sensuous matters it is indifferent. "Is it sick? It is as fain sick as sound ; as fain sound as sick. Should a friend die? In the name of God. Is an eye knocked out? In the name of God." It is complete submission to the will of God, absolute indifferentism to heaven or hell, if they but come as the result of that will (*Ib.*, 59-60, 203, &c.). This is the state of grace wherein no joyous thing gives pleasure and no painful thing can bring sadness. It is the extreme to which Christian asceticism—Christian renunciation of the world of sense—can well be pushed.¹

Putting aside the antinomy between Eckehart's phenomenology and practical theology, let us endeavour to see the exact meaning of his theory of renunciation. He asserts that it is possible by a certain transcendental process to attain a "higher knowledge"; that this higher knowledge consists of an union with God, whereby the individual soul is able to recognise and thus absolutely submit to the will of God. The will and conception of God are identical. His conceptions are the prototypes (*vorgëndiu bilde*) or reality. Hence we might well interpret Eckehart's mystical higher knowledge to refer to a knowledge of the reality which exists behind the phenomenal, and consequently the submission of the individual will to the laws of that reality. Such a theory possesses a certain degree of logical consistency and is strikingly similar to Spinoza's doctrine of the beatitude which flows from the higher cognition of God. Unluckily, Spinoza's cognition leads to joy and peace in this world, while Eckehart's produces only a pure indifferentism. Still more striking is the contrast when we examine the methods by which the cognition is supposed to be attained. Spinoza's is only to be reached by a renunciation of obscure ideas, by a casting forth of blind passion, by a laborious intellectual process. Eckehart declares, on the other hand, that all knowledge of reality is only to be gained by a transcendental act of the divine will; the act itself must occur during an emotional trance, wherein the mind endeavours to free itself from all external impressions, to disregard

¹ Meister Eckehart even goes so far on one occasion as to assert that pain ought to be received, not only willingly and joyously, but even *eagerly*! (*D. M.*, ii. 599.)

the action of all human faculties. Seclusion from mankind, renunciation of all sensuous pleasure, the rejection of all human knowledge and all human means of investigating truth are the preparations for the trance and the consequent eternal birth (*ewige gebürt*). Physiologically there can be small doubt that such overwrought emotions as this trance denotes cannot be conducive of physical health.¹ To this, of course the mystic may reply that health is only a secondary consideration in matters of religious welfare. A greater evil than that of danger to health is the social danger which may arise from ignorant fanatics, who suppose themselves to have attained the "higher knowledge" by divine inspiration. They are acquainted with absolute truth and are acting according to the will of God. More than once in the world's history the cry has gone up from such men that all human knowledge is vain, and the populace believing them have destroyed the weapons of intellect and checked for a time human progress. What test have we, when once we discard reason and appeal to emotion, of the truth of our own or others' assertions? To borrow the language of theology, who shall be sure that God and not the Devil has been born afresh into the soul? Harmless perhaps to the educated, whom it calls upon to renounce their knowledge, Eckehart's doctrine becomes in the hands of the ignorant a most dangerous weapon. In the place of laborious toil, by which truth alone can be won, it allows the individual consciousness to claim inspired insight; the emotions of the individual alone tell him whether he is in possession of the "higher knowledge," and there ceases to be a standard of truth outside individual caprice. Brilliant as are portions of Eckehart's phenomenology, and powerful as his language often is when expatiating on the goal of his practical theology, there hangs over the whole a strangely oppressive atmosphere of possible fanaticism which warns the thinker against trusting in any such version of Christianity,² in any such perversion of the ideas of Averroes.

¹ That great religious excitement might produce the desired trance can hardly be doubted. The mystics seem at least to have been acquainted with such ecstatic phases. Cp. the curious tale of *Süester Katze Meister Eckehartes Tochter* (*D. M.*, ii. 465). Numerous instances occur also in the *Life of Tauler* (English trans. by Winkworth, 1857).

² On the effects of an extreme form of 'rebirth' under the influence of strong emotional excitement, cp. Döllinger, *Kirche und Kirchen*, 333, 340, &c.: "The whole intellectual and moral character is ruined."

III.—MORAL OBLIGATION.

By WILLIAM MITCHELL.

THE reason why, while Science makes a straight course, Philosophy makes a zigzag and doubling advance is that the one is aware from the first of the precise facts with which it has to deal, while the other labours under the disadvantage of having itself to determine what they are. Philosophy must somehow state its own problem, and it cannot do this without somehow first answering it. Could philosophy state with sufficient definiteness what it has to explain, its problem would be, if not solved, at least on the certain road to solution. It has to give the *rationale* of experience. But then, what is experience? It certainly includes much illusion, and neither thought nor experience is at once adequate to expel it. Not our thought, which of itself is a criterion not of truth but of consistency. Not experience, for it embraces the illusions. If you merely pick and choose facts that will harmonise, you may give a certain *rationale* of these; but it is neither the philosophy of experience, nor, if derogatory to other facts, is it more a philosophy at all than an arbitrary generalisation. That is why philosophy is so difficult to make and so easy to criticise. Theories are made which explain certain facts and the rest are fairly or foully thrust in along with them, while those that are too obstinate are treated as sour grapes and handed over to credulity. This is especially the case in respect of Ethics, the science of the practice of man as man, and still more in the case of Moral Obligation by which as man he isolates himself from the other animals and would unite himself with God.

Even for the purpose of mere criticism we must be sure that the facts we flourish are genuine realities and not illusions. But since we cannot adopt all the facts of experience, seeing many are illusory, we are in this dilemma. On the one hand we cannot pick and choose among the facts without adopting a theory to guide us; and on the other hand, we cannot find a theory except we begin from the facts. It is evident that no one part of our fact-experience can be condemned on the mere strength of another part. We can eliminate the contradictions of our thought by reference to the pure facts of experience. But how eliminate the contradictions among these facts themselves? We have to purify

experience, yet experience is the only instrument ; for it is the universal postulate from which alone reason can begin and to which alone it can return.

The consciousness of this circular progress of philosophical knowledge was especially evident to Hume, Kant and Fichte. Philosophy, they saw, must end where it began—illuminating, purifying, unifying, but never destroying or creating. And so, when none of the three could exhibit a rationally complete representation of the philosophical circle, they did not blind themselves to the deficiency. They did not strive to make experience correspond to their theories. Experience as such was their assumption, and their failure to complete the rational cycle in it was not obscured by charging experience with delusion in respect of that part of it which resisted them. So that philosophy was no *petitio principii* to them. They all consciously failed to find a metaphysic of knowledge, that is, of experience in general, which was also a metaphysic of ethics—of experience in practice. What they did was not to attenuate the latter but to leave thought and practice in isolation, each with an explanation of its own.

Now it is just in this respect that their successors have committed their most vital error. The result of it is seen in the existence of so many self-existent systems, each gaining adherents among the unattached but seldom or never proselytising at the expense of one another. We are accustomed to overlook the seriousness only from the commonness of the error. All plead the actual illusoriness and contradiction in experience. Are we, then, in the dilemma of either taking experience as we find it and maintaining our various beliefs however recalcitrant to theory, or of proceeding throughout on the logical fallacy of questioning and purifying our postulate—the standard of our truth? If these are the only alternatives, it is evident that Ethics must proceed in an eternal see-saw of equally possible contradictions. In a case where one refuses to question the validity of the feelings of Freedom, Obligation, Responsibility, while another explains them away, how can either be justified or condemned?

It would be a very easy matter to show that the philosophical interpretation of duty is not the interpretation of duty as I or all feel it, that the benevolence of altruistic Utilitarianism is to me no benevolence, and so on. Even supposing me to be right in such contentions, I am not justified in thus defending the testimony of my feelings to objective truth except from something in them which inevitably distinguishes them from feelings that are illusory. I may maintain with Reid and Hamilton that they cannot with

logical consistency be rejected if anything else is accepted—that I am perfectly ‘parsimonious’ in accepting them; but if I do no more I have only chosen the other horn of the dilemma and cannot defend myself from the suspicion of delusion. Whether to criticise an ethical doctrine or to make one, it is equally necessary to discover what precisely is the postulate from which to begin. If no inviolable postulate can be found, our morality can only be a more or less systematised theory of practice as in Hume; or if it professes to be anything else, it will fall into the logical chaos which he was able to avoid.

It has already been said that no one fact of experience as such can have any claim of itself to superiority in comparison with any other fact. The difference between contingent and necessary truth is a difference not of the validity of fact as fact, but of the function which we find facts displaying. The bare feeling of any characteristic of a particular fact is undoubtedly the key to its importance in the unreflecting consciousness. But in philosophy no such subjective criterion can be applied without dogmatism. It is not subjective but objective certainty that we require, and the problem of philosophy is just this: to convert our subjective certainty—our faith in the uniformity of nature, in freedom, in subjection to moral law—into objective certainty. How can I who feel bound to obey a moral law say that every one is bound to obey it? I may analyse my state of consciousness to the utmost, but I can get nothing beyond it in my analytical judgment. Whatever feelings of necessity, universality, immediacy I find it containing, I can only say they are so for me. To say that I recognise the law itself as that which contains necessity is still to say that *I* recognise only. So long, indeed, as I merely adopt the subjective position of common self-consciousness, so long is it possible for another to say that I may be deluded. I, as an individual, cannot from a mere individual’s standpoint—from the purest fact of my consciousness—prove that I am capable (as I *am* capable) of legislating for the world. As little, on the same conditions, can the world legislate for me. What it legislates for me is no moral obligation but force, unless it corresponds with what I legislate for myself. On the contrary, when I claim to legislate for society or society claims to legislate for me, both presuppose a system of law which is peculiar neither to society as such—as a majority say—nor to me as an individual.

In one sense then we can derive neither objective from subjective obligation nor subjective from objective. Yet in

another sense we do and must do both. The reason why criteria of actual truth have so often failed is that they have seldom had a true objective application given to them. This was the case with the Cartesian criteria which aimed at obviating contradiction, but they never could get beyond a subjective application. For the removal of objective contradiction some transcendent principle had to be assumed—either generally, as with Descartes, the perfection of God, or particularly, as with Spinoza, the agreement of the idea and its *ideatum*, and with Leibnitz, a pre-established harmony.

Equally valueless for objective certainty are the criteria of necessity, universality and immediacy or 'apriority' as mere characteristics of a cognition. If, in the first place, one says that he *must* believe so and so because of his own nature or because of the self-evident nature of the cognition, he satisfies himself, but is quite unable to satisfy another till he show that this necessary perception of a cognition or perception of a necessary cognition is independent of him as a particular individual. He must, in short, somehow universalise either himself or the cognition. But, in the second place, that cannot be done by pointing to the *universality* of the conception; for the physical evolutionist will inquire as to its origin and then point to the uniformity of the circumstances of human life as its cause, whether it be true or delusive. And, in the third place, the *immediacy* or 'apriority' of a cognition equally fails to assure of objective validity. For, on the one hand, men differ in regard to the beliefs of which, nevertheless, each maintains that he has an intuitive or necessary knowledge; and, on the other hand, one can never know whether or not he is using absolutely *a priori* knowledge. As a matter of fact, most of our perfectly intuitive knowledge was demonstrative at one time of our life; and, as a matter of strong supposition if not of scientific demonstration, all our intuitive knowledge has had a similar history in the history of the race. Finally, all three criteria fail to give the transference from idea to fact, from conviction to truth, from subjectivity to objectivity. I may talk of a moral law which I for my part never excogitated or developed in me more than I do the light of the sun,—a law which I find in every one and which comes to me with a vividness and self-evidence that I cannot resist. But this alone will not prevent Hegel or Darwin from telling me that my inquiry should begin where I leave off. I cannot pass from conviction to truth by using the criteria of the former. The real criteria of both may be the same, but that is just what I have to prove, and I cannot prove it from an individualistic standpoint.

It is evident that we can assign reality or truth to the facts of which necessity, universality and immediacy assure us, only after we apply the question of evolution to them. Whence are they? What is that subjective necessity which is objective and transforms convictions into realities? It is not the necessity of conception to any one, but its necessity for existence or experience; not the fact that it is believed by all men, but that all experience requires it; not its underivedness in any one's mind, not its priority in time, but that it is the logical *prius* of the particulars from which it is thought to be derived. Our purpose is not to make a transcendental justification of the ethical conceptions. What we do is to assume this rather and to state its counterpart. That is to say, we assume the existence of an ethical sphere of action and develop the consequences of that assumption. If such a sphere of action is denied, if, in other words, Sceptical or Egoistic Hedonism is maintained, there is nothing further to be said. For it is quite possible to deny the validity of the whole scope of Morality. One has only to brand the whole thing as delusion to be secure against every demonstration, seeing that every proof must begin with part of what is denied. I might exhibit the chaos into which the world would fall were morality expelled and did only personal gratification remain, but no one could demonstrate that such chaos was not the natural state and that order was not a fraudulent imposition of schemers for their own behoof.

Proceeding then to constitute Ethics as concerned with a distinct round of experience, we apply our objective criterion and ask—What is the principle which determines the science of Ethics as such? The sphere of morality is notoriously the home of subjective conviction. What, then, is it that justifies or purifies these convictions to the individual in regard to their claim to actuality? Whatever it is, it is inviolable *for Ethics*. That is the cardinal point of this paper. We must find it in order to avoid the suspicion of delusion and subjective dogmatism in our assertions of freedom and in cases of conscience, as well as to justify our feelings of remorse and devotion. When we have found it we cannot tamper with it without begging the question, for it must be the universal postulate in ethical determinations.

As we have already hinted, it is Moral Obligation. There are many other elements without which morality would be impossible, but as these apply to other spheres of knowledge besides Ethics they are not the determiners of the ethical

sphere as such. Every science has both a general and a particular determination. Thus the physical sciences are generally determined under logical laws with reference to their generic element, while they are also particularly distinguished from one another. So in Ethics, though freedom is an indispensable characteristic, and even though it might be said that we should not have become aware of freedom but for morality, it is not freedom which constitutes Ethics as a separate branch of philosophy, seeing that we are as free in other spheres of experience to which morality as such does not extend. Nor is it the possession of self-evident practical laws or of an ideal; for we possess such in the sphere of prudence which is out of, or at least wider than, the sphere of Ethics. Finally, merit or demerit being the concomitant of freedom is likewise too wide, and responsibility is consequent upon obligation.

If, then, there is a distinct sphere in the round of human action—call it Ethics, as in this paper, or a branch of Ethics, it is no matter—it is determined from the rest of human action by moral obligation, which on that account becomes also the first determiner of its contents. When we say that Ethics exists for the enlightenment of our moral obligation, we do not mean that a doctrine of duty must always be the main feature of every system. We should rather expect it to be the least prominent part. But it should always be remembered that what affords the guiding line of the whole process, what enables us to get beyond our own subject to legislate in morals, and what makes society a legislator for us, is this obligation. However slightly therefore anyone treats of Duty, and this is naturally most apparent in Aristotle the founder of Ethics as a distinctive science, it is this conception which determines every other ethical idea. Our question, then, is—What theories of End, Freedom, Merit and Responsibility are consistent with the postulate which enables them to be ethical theories at all, and for the sake of whose ultimate enlightenment they ought to exist?

The character of any ethical system is known by the end, ideal or standard of action which it professes. Our question is—What must be the characteristics of the end by reason of its determination through obligation? It is just the converse of this question that is usually put. But every attempt to derive oughtness from rightness must, as we have shown, either end in an illogical system or destroy the possibility of a separate science of Ethics at all. The history of Ethics in England furnishes an apt illustration in

the three stages represented, say, by Bentham, Bain and Spencer. Each begins by determining the right or end and subordinates to this what should have been the postulate. The result, of course, is that morality coalesces with prudence. The three stages are marked by the aspect which obligation comes to assume. Bentham expels it, Bain admits it in an external way by handing it over to the police, and Spencer absorbs it by identifying it with existence. No other conclusion than this was possible: what ought to be, is, and that not more as a philosophical reality than in every the most contingent action. If there is a science of ethical practice at all, obligation cannot be subordinated to the end but the end must be subordinated to obligation. And so we repeat our question—What are the necessary characteristics of the ethical end in view of the postulate of morality as such?

They are, that it be at once subjective and objective and equally valid and harmonious in both respects. It must be subjective, that is, it must present some interest to my desire before I could recognise it as a law to *me*. It must be objective, that is, it must present some interest external to my individual desires as such before I can recognise it as *a law* at all. An obligation is just the principle which expresses the equal validity of the same law as subjective and objective. The end must be subjective but not individualistic, and objective but not external.

With this criterion of ends determined by the necessary postulate of Ethics, let us inquire how far it is satisfied by the ordinary ideals of moral systems. It is apparent how the history of Hedonism has throughout its progressive career endeavoured to realise it. Beginning from the Sophistical position of unlimited subjectivity, which is to Ethics what Pyrrhonism is to Metaphysics, *i.e.*, what neither can answer in any other way than by neglect, Hedonism has sought to find some end which should be at once of equal subjective and objective validity. But, though it has passed from a formula of pure egoism to a formula of pure altruism, it has failed to find an end which shall preserve equally the rights of the subject and the rights of the object: and this, just because it has always been forced by its presupposition to occupy only one of the two standpoints, and has consequently been unable to do justice to the other, since of themselves they manifest no inherent connexion with each other. Not that this dilemma has not been seen. Every system of Utilitarianism has been an attempt to overcome it and nothing else. But it cannot be

overcome till Mill's question—'Why should I promote the general happiness?' receives the answer—Because it is when and only when I promote the general happiness that I increase my own; in short, till there is no opposition between my own and my neighbour's good—till Egoism becomes Altruism and Altruism Egoism; till, that is, the collapse of Obligation or Ethics itself.

In such a hopeless condition Utilitarianism was bound to lie till it somehow should get out of itself and criticise the absolute value of its own end. Now this has been done in two opposite directions—by the Rational or Universalistic Utilitarianism, and by the Ethics of Physical Evolution.

We concern ourselves with these theories only in respect of their attitude to the necessary postulate of Ethics. The end we found must be such as to conserve the rights equally of the subject and of the object. Now it is to this condition that Utilitarianism has, in its two developments, sought however unconsciously to conform. They are both prompted by Mill's introduction of quality as the distinguishing feature in hedonical calculations; for that was really to oust happiness as such from being the determining end. Utilitarianism was forced, as Socrates had been, to apply the calculus, the 'measuring art,' with the purpose not merely of measuring pleasure but of constituting or determining its absolute value. And since the value of the pleasure which an object produces differs with the attitude of the individual towards it, it is the best attitude which becomes the end; in other words, it is the harmony of the subject and the object.

But now, what is required is not a mere assertion of the harmony but the *rationale* of it. This the Ethics of Physical Evolution has seen and seeks to give. But the Universalistic and Rational Utilitarianism really presents no end, but only an ideal fusion of the rights of the subject and the object, without discovering the ground or determiner, rather only the consequence, of the fusion. It begins with what was the common conclusion of the Stoics and Epicureans, and amalgamates without unifying the reasoning of both as justified by the presupposition of the conclusion. It gives no *rationale* of the connexion between Happiness as such—the right of the subject, and Virtue as such—the right of the object. Whether happiness causes virtue or virtue happiness remains still the antinomy of practical reason. Nor is Kant's barren conjecture further advanced. "It is not impossible," he says, "that morality of mind should have a connexion as cause with happiness (as an effect in the sensible world), if not immediate yet mediate, *i.e.*, through an intelligent Author of nature."

The other development does present the required *rationale*, namely, in physical evolution. It is this which determines the true ethical end—human development towards the complete realisation of function and adaptation to environment. At present it constitutes, says Mr. Spencer, a Relative Ethics, but in the distance we see it will bring out an Absolute Ethics, in which, “instead of each maintaining his own claims, others will maintain his claims for him”. This is just what Utilitarianism has always sought, as it had to seek; but it has obviously been gained only by reading ‘existence’ for ‘obligation,’ ‘is’ for ‘ought’. Morality is taken from the individual and habited in an external determiner, or, to say the same thing, it is left with an individual who, in everything he does, exhibits the resulting product of a determination, to which in ultimate analysis he is found to be the passive subject, if anything more than the resultant himself. The ethical end is thus not for, but of, man. Not only is morality proper taken from the individual; what ghost of it remains is equally claimed in kind by the meanest object of his environment. Just as Clifford found it necessary so to extend the psychology of this evolution as to find the elements of consciousness in material operations, for the sake of the same consistency this physical ethics has to be similarly extended. Thus, while Spencer would apply moral distinctions only to the actions of sentient beings, his natural successors see no reason whatever for the limitation. “Is a watch that won’t go the less a bad watch,” says a writer in *MIND*, “because it neither made itself nor wound itself up? . . . Is a man the less a bad man because he only follows his bad will and did not originate it?”

The only other end we shall examine under the postulate of Obligation is Perfection. Now subjective perfection, the mere attainment of efficiency, is not the ethical end for the simple reason that it may not include the rights of the object. Accordingly all the famous systems of Perfection have had an objective as well as a subjective reference. This is prominent in the formulas—to realise, according to Aristotle, the perfect exercise of a perfect life; according to Kant, an absolutely good-will; and according to Hegel, universal self-consciousness. Each of these regards the perfection of the individual as only a constituent in the actual end which is at once internal and external, subjective and objective. Society and the individual reach perfection, not by the former acting for itself—the doctrine proper to Physical Evolution, nor by the latter acting for himself—the doctrine of Sophism or Egoism; neither according to such

impossible ideals as the former acting for the latter—the ideal of the Absolute Ethics, or the latter acting for the former—the ideal of modern Utilitarianism. Both are in essential relation; and that for which obligation rests on each is just the realisation and thereby the perfection of that relation. Only after discovering what that relation is, are these formulas admissible, and then they are all admissible. The discovery can emanate of course only from self-consciousness where we find an identity of nature and interest with one another. Here we discover that the relation is self-relation and that its perfection consists in its infinity—in our self-satisfaction or freedom from external determination. The perfection contemplated by Mr. Spencer, on the other hand, is the finite and necessitated ideal of a complete external adjustment. The laws of morality are the expressions of this ethical self-relation. What experience does is as little to produce them as to construct the ideal to which they point. It only determines them to greater particularity and definiteness. They are accordingly *a priori* without being abstract, and actual or concrete without being an external product.

The application of the postulate of Obligation has a double function relatively to moral freedom. In the first place it assures of the reality of that freedom, a thing which no demonstration could do (except for metaphysical freedom) in view of possible doctrines of association and unconscious cerebration. In the second place, it establishes the essential characteristics of moral freedom without which no theory of it can be adequate. Confining ourselves to this latter function, we have to ask,—What is the necessary characteristic of a moral agent in view of Obligation? The answer can only be that man must, in the first place, have power to perform every obligation, and, in the second place, that the exercise or non-exercise of such power must depend on himself alone. But for the former I should not recognise the law at all; but for the latter it would be no law for me.

We need not examine any of the many theories of freedom that are founded on a psychology which makes the realisation of these conditions impossible. If, as Spinoza says, “the mind cannot determine the body to motion or rest or any other state,” we need not care to discover whether mind is a function of brain or has its dynamical power and the reason of its existence within itself. Our freedom must be able to express itself in the determination of phenomena.

So, too, if the metaphysic of knowledge necessarily excludes it. Kant came dangerously near this position and is often actually in it when representing the sensible world

as self-determined, independently of the noumenal world. It is from this Kantian source that the undetermined will of Schelling and Schopenhauer is developed. Schelling, making the distinction between the noumenal and sensible worlds, defines free actions as those which proceed from the former. But before the noumenal *Ego* acts it must be disposed or determined to a specific nature. This nature we do not assume in time, and nothing we do in time can remove one particle of any essential evils it contains. Our sensible actions are therefore all inevitably determined. But we feel remorse in respect of them just because we know that we might noumenally have assumed another nature. Beyond the useless revealing of this noumenal freedom the feeling has no rational function. Similarly Schopenhauer is related to Kant, whom indeed Hartmann calls the father of theoretic as Schopenhauer is of practical pessimism. He lays the guilt of our actions on our character—a blind will—whose nature our actions reveal. We can never help acting as we do, seeing that willing always precedes knowing. Regarded from an external point of view our actions might have been different—that is, had our character been other than it is, or had we been some other person. When I regret it is my constitution I regret. I can only be sorry I am not another. Such doctrines of freedom are divorced from obligation, which nevertheless is the Kantian postulate for proving the existence of freedom at all.

The interpreter of Kant has two courses open to him. He may suppose either that Kant represents the sensible world as completely determined in itself, or that he makes it dependent on the noumenal world in some vital way. If the former, then to make Kant consistent, the interpreter must deprive him of the noumenal world (to which he held tenaciously) as an unwarrantable, because an unnecessary, assumption; which is to deprive him of his whole doctrine of morals and leave him in intellectual agnosticism. In the other alternative, we must find in his work that he has some living connexion between the two worlds. If this be found, the latter can evidently be the only just interpretation.

Causality is one of the scientific categories or categories of ordinary experience, and so has its full application in the sensible or phenomenal world. We cannot apply it in the same sense to anything else without dogmatism—such dogmatism as is expressed in the current agnosticism which manipulates the common categories at will as in Mill's question, Who caused God? From the standpoint of science or experience we know only that causality is becoming, but in morals we find that becoming is only the

phenomenal representation of causality. We find that causality is more than a mere time-relation. It is a determination of an object before it receives—before it can receive—the determination of time or of any other phenomenal relation. It is the logical *prius* of a phenomenon as such—the first predicate of every possible object of sensible experience. No phenomenon could be a phenomenon at all without it. On the one hand, then, we can represent the sensible world as complete and determined ; and, on the other hand, we can point to the freedom of the cogitable world as expressed in it. In the former sense, we say motives cause volitions or resolves ; in the latter, that I alone am their cause. Motives, I can say, become resolves just as I can say that a certain combination of gases becomes water. But analyse the antecedents in either case as I may, I can find no trace of the effect or of any causal nexus in them, for no phenomenon is adequate to express more than it is in itself. The causal nexus is not phenomenal. Before the time-relation of becoming, or, as we say, physical or phenomenal causation, is predicable of an object, the object must, like all phenomena, be causally determined by a transcendental unity implied in all systems of relation. The self-conscious agent in that unity *I* is the cause that determines my motives, my resolves and actions to be what they are. Motives become volitions and volitions become actions not in respect of any abstraction like a phenomenal succession, but by reason of the unity which gives them their first determination—and which we have called the causal determination—to be phenomena at all.

Such a function moral obligation postulates for will as the first of its two characteristics, namely, that it have power to fulfil its obligations. We proceed to the second, that the exercise and non-exercise of such power must depend on the agent—the subject of obligation. Under the former we have seen how he is free in his phenomenal relations, *i.e.*, How he *can*. We must now discover how he is free in his essential or self-relation, *i.e.*, How he *can*.

As it is the confusion of will and desire which creates the difficulty of conceiving the personal manifestation of freedom, so it is the confusion of will and knowledge which makes it difficult to keep man in his individuality. The history of ethics shows that it is hardly possible to escape from identifying will and desire without identifying will and knowledge. Thus the earliest moral speculators, the Sophists, committed the former error, being immediately followed by Socrates who committed the other ; and so on through all the ancient systems. The modern course was opened by Descartes with

the former error ; Spinoza added the other, and so on again till the present time when the doctrine of Evolution claims to resolve the difficulty—the physical, by uniting reason to desire, *i.e.*, under the form of physical necessity ; the dialectical, by uniting desire to reason, *i.e.*, under the form of freedom. We confine ourselves to the latter.

To say with Green that “in the sense in which thought and desire enters into an act of will, each is the whole act,” or that “will is equally and undistinguishably desire and thought,” is just to say that a man never acts but for an end he desires, and that he is free when that end is rational. Now, while this is a correct representation of the acts of men, it is not the freedom with which we are more immediately concerned. This metaphysical or general freedom when demanded from a man, as is done by obligation, postulates a particular freedom in him. The one is the freedom of God which we are commanded to realise, the other is the freedom which we demand for the purpose of performing that command. Obligation thus postulates both this objective and this subjective freedom. It could not impose the latter without presuming the former, nor if it imposed the former without presuming the latter would it be any longer obligation at all. The significance of freedom in Ethics as a science is the state of the individual before the harmony of thought and desire, before ideal freedom has been realised. That it can be realised we presume under the postulate of obligation. How it is realised we also know. It is through self-reflection, through thereby recognising the limitations of impulse, that man becomes superior to impulse and is released from physical necessity. Man shows his freedom when by such absolute reflection he harmonises reason and desire in the satisfaction of moral obligations—when practical reason is his sole guide and he acts under the idea of this complete self-satisfaction.

This distinction between the distinctively metaphysical or objective and the distinctively ethical or subjective freedom is not to be confounded either with Hegel's distinction between absolute and formal freedom or with that between determination and indifference. Absolute freedom is that which has been described. It has itself for its object, is wholly self-related and becomes determinate through no external impulse but by its own infinite self-reflection. The formal freedom has a limited or contingent content and is variously denominated by Hegel as caprice, arbitrariness, wilfulness. It is free at all just because it consciously transcends limitations ; but its transcendence is finite and relative, for its reflection is not self-directed but proceeds from impulse to

impulse, from cause to consequence, thereby being partly determined from without. Now the will must in action be always one or other of these two, that is, it must manifest itself either in absolute or in formal freedom. But obligation, as it applies to the individual before such manifestation of his will, applies to a state in which it is possible for the individual either to identify himself with the universal reason and be free or to refuse to do it. A murderer sentenced to death, says Hegel, is free only when he wills to get hung. We with the postulate of obligation, if in this case it applies, if the harmony of desire and knowledge is attainable, claim for him a freedom which shall enable him to attain it.

Nor is this distinction of subjective and objective will to be compared with that absurd outstart of much current discussion as to freedom,—‘Will is either determined or undetermined, that is, indifferent; now, if it is not determined,’ and so on. The alternative is perfectly good in Psychology, but except for the misconception it breeds it has precisely the same importance to Philosophy as the fact that it was fair yesterday but it rains to-day. Indifference, indeed, is generally itself a form of determination and is always on a level with it in the case of a self-conscious being. Man has always subjective freedom—the power to realise or not his proper or objective freedom. If he does not so realise himself in his actions, he is *indifferent* to his proper self or is *determined* by the blind force of his external relations. If he does realise his objective freedom, he is indifferent to the blind force of his external relations and is determined—determining them—according to his proper self.

I ought now to examine in the same way the ideas of Merit and Responsibility, but it is better to close here as these subjects have lately become too prominent in ethical literature to be adequately treated within the limits of this paper. For the present purpose, too, a critical discussion is unnecessary. Merit and Responsibility are the necessary consequents or complements of the ideas already discussed. It is just as legitimate to reject them (in the only sense in which anybody gives them any meaning and value), on the ground of Physical Ethics, as it would be for a man who had gone round the world to deny the existence of some place which could not have lain in his way. Nor are these ideas in any way inconsistent with the fact that to make the moral law square with the appetites is, as Kant says, “to corrupt at the source the fountain of Duty and to banish and cloud all its dignity”; seeing that in ethics they spring from and are determined by that very fountain of Moral Obligation.

IV.—THE NEED OF A SOCIETY FOR EXPERIMENTAL PSYCHOLOGY.¹

By JOSEPH JACOBS.

THIS is the age of Societies. Agriculture and ballooning, cart-horses and dentistry, engineering and forestry, all subjects from A to Z, are represented by associations intended to promote the interests of each particular subject. Psychology alone has no society connecting together the workers in the wide field which the science of mind can claim for itself. Yet neither work nor workers are wanting. The science itself has reached what we may term the *monographic* stage. Methods of investigation are sufficiently advanced to allow of the work being allotted to specialists in the various branches of the study. Much too is being done for psychology by workers in other sciences. A quarter of physiology—all that part which deals with nerves and much that deals with muscles—is as much psychology as physiology. Most of the experience gained by mad-doctors is so much material gained for mental science. Social statistics have their lessons for the psychologist. Much of anthropology and almost all folk-lore, almost all sociology and all that the Germans mean by *Völkerpsychologie*—what are these but *data* of the science of mind? So too philology—in as far as it deals with meanings, not roots—has rich instruction in store for the psychological investigator. And all these studies might hope for reciprocal aid from psychology, which may one day assist biology in determining what constitutes the unity of the organism. But all this awaits the progress of the study of the individual mind; and it is the need of a society to develop this study by collective investigation that I wish to point out.

Such a society would fulfil the ordinary functions of similar institutions by affording a *locale* where fellow-students might get to know each other and each other's work. It could collect at its rooms a specialist library; it could provide instruments needed in psychometry and now only accessible to persons with long purses or mechanical ingenuity. It could publish memoirs, *Jahresberichte* of progress in the various branches of the science, and supply a much felt

¹ A Paper read before the Aberdeen Meeting of the British Association.

want by encouraging the compilation of classified bibliographies on special problems. It might aid in settling the technical terminology of the science, which is at present largely arbitrary. All these functions could be performed by a Psychological Society with advantage to the science and its students.

But a Psychological Society could be made to advance the progress of the science in a manner peculiar to this branch of study. The minds of the members could be utilised so as to form, as it were, a living laboratory; and it is to this mode of investigation that I wish here especially to call attention. Mr. Galton has shown in his varied researches the practicability of getting answers from educated persons as to the contents of their own minds. What he has done *privatim* and accidentally could be done on an organised scale by a society such as that here proposed. Membership of it might be held to imply willingness to answer questions on psychological subjects issued by properly constituted officers of the society. Any member studying a particular problem in which introspection was needed could rely on obtaining a mass of materials from persons who, by being members of the society, might be expected to be specially skilled in examining the contents of their own minds. The process might be somewhat as follows. The investigator would apply to the executive committee, stating his problem and the data he wished to collect. The committee, if they thought the matter promising enough, could then appoint a sub-committee authorised to issue pertinent queries to the members or other persons, as *e.g.*, schoolmasters, qualified to give information. To this sub-committee the inquirer would *ex officio* act as honorary secretary, and it would be his privilege to draw up the report on the subject. Something like this is probably done by all societies or clubs, sporadically and on special occasions; but the peculiar nature of psychological investigation renders it specially fitted for periodical and organised inquiries of this kind. I remember hearing of a number of French physicians who styled themselves a Society for Mutual Autopsy, because each of them, like Bentham, agreed to leave his body to be dissected by the surviving members. What they did with their bodies, I propose should be done with living minds. Whether done by a society or by individual efforts like those of Mr. Galton, it is only by such 'mutual autopsy'—or collective investigation—that the science can be freed from its fundamental and inherent defect of subjectivity. Only by this means can we clear it from the

danger of mistaking individual peculiarities for general laws, and transform it from the study of individual minds into a true and valid science of mind.

Such in outline is a working scheme for a Society of Experimental Psychology. Is it workable? That depends on two considerations—the number of workers and the amount of work we could find for them to do. As regards a possible dearth of workers, we cannot know about this till we try. A psychological journal, *MIND*, has reached the tenth year of its existence. London University has for the last quarter of a century required a knowledge of psychology from all its Bachelors. There are two philosophical clubs in London, and most universities have similar institutions attached to them. Cambridge has of late years been turning out trained students of psychology who have had the benefit of Prof. Sidgwick's and Mr. James Ward's teaching. Recently many educationists have had to pass an examination in mental science. Surely among all these a sufficient band of workers could be organised if we but knew how to get at them. And, in addition to these, the recent advance in female education has been preparing many minds as subjects of experiment who have plenty of leisure for introspection. Besides we do not want investigators so much as objects of investigation—*investigates*, if we may so call them. It would be indeed strange if we could not find a sufficient number of persons interested in introspection in a country like England, which has shown itself pre-eminent in the two arts—fiction and the drama—which have closest connexion with psychology. And the mention of fiction reminds me of a quite unworked field for psychologists which a society might cultivate. For the last fifty years we have had a large number of persons whose life has been passed in examining and exhibiting the processes of other men's minds. From their experience the science of human nature ought to be able to learn something. I need only refer to the stores of acute observation contained in the works of George Eliot and George Meredith.

As regards the number of unsolved problems which could be found suitable for collective investigation, there is less difficulty. There is the whole field of psychophysical inquiry now being worked so zealously by physiologists and by the school of Fechner and Wundt in Germany. We have here begun to measure men's minds by measuring their senses. Observation on children's minds, as attempted by Charles Darwin, has almost grown into a separate study, to which the apt name of Baby-lore has been given.

Mr. Galton's studies in imagination might be followed by similar inquiries on after-images, powers of observation, memory, linguistic capacity, calculation, capacity for following trains of reasoning of various kinds, and the like. If this were systematically effected, it would not be too much to hope that before many years were over, a schoolboy's mental powers could be tested and measured with as much accuracy as his height and weight are now. We want to know more about colour-blindness and note-deafness, about the lip-language of deaf-mutes, the personal equations of astronomers, the mental processes of paralysed persons, of calculating boys, and of the so-called 'thought-readers'. It would be useful to have some actual trains of association jotted down by psychologists who can write shorthand. Details of memory could be tested by accurate observation of the events at the time of occurrence. Can we think in a foreign language? When we read a novel, do we actually have pictures of the scenes before our minds? When novelists write, have they similar pictures and how far do these correspond? Can we, like Cæsar is said to have done, read and listen at the same time, and then reproduce what we have read and heard? How quickly can one read, and how much does retention depend on the pace of reading? How are family traits set? Our sensations of local and temporary death in a limb that is 'asleep' are fit subjects of inquiry. What is the difference in our minds when alone, among friends, in a crowd of fellow-townsmen, in a crowd of foreigners? How many things can we attend to at once? All these and a hundred similar questions will occur to any one accustomed to think about his own thoughts. Not that all of them deserve equal attention: on the plan I am suggesting this would be determined by the executive committee before papers of questions could be issued. But most of them admit of easy tests being applied, and some of them or others that might be suggested may aid us in settling such problems as these: the influence of early impressions, the ingredients of character, the classification of the emotions, varying susceptibility to bodily pain and mental anguish, variation in the intensity of the point, and extent of the field, of attention. Above all we want experiments on will-practice: it is possible that character could be immensely modified if we could begin by training our will on one thing till we got it perfectly under control. Or it may turn out that this is impossible beyond a certain age which would have to be determined. The whole field of heredity would still remain, affording enough work for a society by itself.

I may illustrate what I have been saying by taking some particular point on which collective investigation would throw light. A German psychologist, Dr. Ebbinghaus, recently published the results of an elaborate examination of his powers of verbal memory. [See MIND XXXIX. 454-7.] Among other points he studied how far the power of remembering sounds apart from sense depended on the number of syllables to be learnt. He arrived at no very definite result, but from his materials I fancy I have discovered the following curious law. There is, I submit, a certain number of syllables up to which each person can repeat a nonsense word like *borg-nap-fil-trip* after only once hearing; and it is probable, though we cannot know for certain, that this number varies with different persons, giving a sort of test of their linguistic capacity. This limit one may term 'the threshold of verbal memory'. Now from Ebbinghaus's results I suspect that for every syllable over the threshold the word has to be repeated three times before we can exactly repeat it. Thus taking a nonsense word of nine syllables, *pal-eng-mon-lif-tra-mig-pro-fu-jil*, a person whose threshold was six syllables could repeat it after nine repetitions; if seven were the threshold, in six repetitions; while a Mezzofanti with eight as a threshold could learn it in three. But this law, if it is a law, has at present only been deduced from observation of one man's mind, and is therefore obviously not a law of mind in general, but at best a law of Dr. Ebbinghaus's mind. It is possible and I think probable that besides the variation of threshold with different persons there may likewise be a variation in the constant multiplier, so that a person with threshold six might require not three, but four times the number of surplus-syllables to obtain perfect reproduction. All this could be settled with ease if a Psychological Society existed whose members would be willing to amuse themselves and instruct others by trying after how many repetitions they could repeat perfectly—though not necessarily remember afterwards—each of the following nonsense words:—

- (4) *Bor-nas-tri-slip.*
- (5) *Cral-forg-mul-tal-nop.*
- (6) *Ab-nar-chif-vol-zil-tuf.*
- (7) *Dak-mil-tag-bin-roz-nil-gug.*
- (8) *Gom-lar-gol-foo-nop-ril-lu-chat.*
- (9) *Pal-sug-mon-lif-tra-mif-gro-pu-jil.*
- (10) *Fud-wij-ta-ning-por-lo-trig-num-gri-foo.*
- (11) *Jus-lot-ling-grif-wuz-kom-ril-gru-fur-drom-lif.*
- (12) *Morg-lap-tril-gog-maf-timp-ru-lop-fo-grif-tu-pol.*
- (13) *For-eli-nip-tral-mor-gif-ti-glip-pra-mu-nag-lop-ti.*
- (14) *San-tor-li-con-grum-jin-go-tol-gan-su-jim-tok-wil-fo.*
- (15) *Min-dal-tul-fuj-sul-mor-lu-fon-tif-gim-zik-tat-mi-ju-lon.*

Care has to be taken in forming such test-words that the syllables do not fall into any marked rhythm which considerably lessens the trouble of repetition. Hence the ease with which one can retain the comic query—

Chrononhotonthologos,
Where left you Aldiborontephoscophornio?

So too the test-words should be learnt as wholes and not bit by bit, or else the suspected law cannot apply. Thus by dividing we can conquer Shakespeare's longest word *Honorificabilitudinitatibus* (*Love's Labour's Lost*, v. i.). Any one can say *honór* and *ificá* and so *honóricificá*. Similarly *bilitu* and *dinita* easily combine into *bilitúdinitá*, whence the road is direct to *Honóricábilitúdinitá*—to which we add *tibus* at our leisure. But add a few consonants to divert the rhythm, e.g., *Hol-nop-rig-firn-can-bif-lim-tug-dril-ning-taf-til-bus*, and it will take a man of seven-threshold eighteen repetitions to be able to repeat it without mistake. All this may seem trivial and worthy only of the *Boys' Own Book*. But when it is remembered that upon a boy's verbal memory depends his possible success with a classical education, the determination of his threshold of memory and, if there is such a thing, his constant of repetition will immediately appear as eminently practical tests for determining such a point as whether he shall join the modern or the classical side of a school.

And this leads me to conclude with a few words on the importance and need of psychological inquiry, especially when as in the last simple instance it leads to results bearing the true stamp of science in its capacity for measurement. Education can never be much more than a rule-of-thumb affair till it can apply psychological principles with a firm conviction of their validity. A boy's progress can only be guessed at nowadays: if such tests as the above could be applied systematically, it could be measured. So too the dread question which is being asked more and more frequently, "Canst thou minister to a mind diseased?" must wait for its answer on the progress of psychological science. And if the Art of Conduct is ever to be more than rough inductions of social convenience it must find a basis in a properly constituted Science of Mind. The final end of all the sciences represented this year in Aberdeen is to make the characters of men good. Yet we do not know at present what constitutes the ingredients of a man's character, still less what makes that character good.

V.—RESEARCH.

STUDIES OF RHYTHM.

By Prof. G. STANLEY HALL and JOSEPH JASTROW.

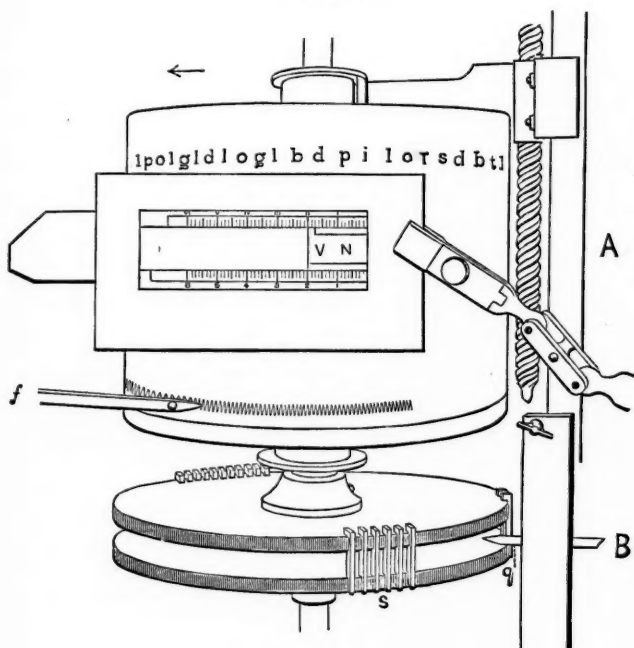
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I.

IN a series of observations undertaken in the psychophysical rooms of this University by Mr. J. M. Cattell, single letters of 1.75 diopters were cut out of a book of Snellen's optotypes and pasted in horizontal rows 1 cm. apart on a white background around the revolving drum of a Ludwig kymograph. Care was taken that there should be no repetition of letters or of sequences and that the letters should not spell or suggest any words. These letters were viewed at a constant distance of easy accommodation through a screen placed as near as possible to the drum, by means of a slit 1 cm. wide and of variable horizontal length. The revolution of the drum gave thus the conditions of normal reading except that instead of the eye moving along the line of letters the line moves in the opposite direction across the field of vision, the eye remaining stationary. By varying the width of the aperture or slit, the rate of movement of the drum and the size of the letters, several interesting determinations elsewhere to be reported were made. One striking result, somewhat incidental however to the main object of these observations, was that under the same conditions the names of the letters could be pronounced more rapidly than the letters could be counted. With the slit open, *e.g.*, 1 cm., exposing thus one letter at a time, the average time of many records each in nine different persons was 0.248 and 0.283 sec. per letter at the most rapid possible rate of pronouncing the names of and of counting series of fifty letters respectively. As in naming letters we can foresee no sequence but only the interval, while in counting we foresee the succeeding number-names and have only to match a series of visual and an established series of motor impressions, this time-relation was not foreseen. In a later series of observations yet unfinished, Mr. G. T. Kemp counted linear sets of from three to thirty black squares pasted upon strips of white pasteboard. The eyes were brought before a long slit closed by the arm of a long horizontal lever held in position by a magnet, while the attendant placed any slip in the slide where it was instantly seen as (after an *avertissement*) the lever fell. The observer had to press a key as soon as the counting was finished, and the attendant only to set the Hipp-chronoscope and record the results. As the whole series to be counted was seen from the first and the position of the first spot to be counted was predetermined, and as all erroneous results were excluded by the recorder and all

those that seemed exceptionally long or otherwise unfavourable rejected by the counter, the conditions were favourable. Yet even here for the longer slips of between twenty or thirty spots the average time per spot was rarely reduced below $\frac{1}{4}$ sec. and sometimes reached and even exceeded $\frac{1}{3}$. The strain of concentration is great. The attention is very prone to slip forward or backward one or two steps or to lose the place along the line of such uniform spots even if they are 1 cm. apart and only 1 ft. from the eye, and rests must be frequent and of increasing length. By arbitrarily varying the rhythm, *i.e.* by counting by ones or in groups of twos, threes, fours, &c., the time-results can be varied constantly, as will be seen later in the full report, but very rarely reduced below the limit.

APPARATUS.



For the further study of these and other rhythmic phenomena, undertaken with Mr. Joseph Jastrow, two round plates of solid brass, 17 cm. in diameter and 4 mm. thick, were fastened 2 cm. apart and clamped by a screw on the upright revolving shaft

of a kymograph. Around the entire circumference of these plates notches had been sawed 4 mm. deep and 2 wide at regular intervals of 2 mm. for one and 4 for the other half circumference. A hundred uniform brass slots, stamped out with a die, were made to fit these notches so exactly that they would go in easily with the hand and yet not be thrown out by the revolutions of the plates. These slots could thus be set into the notches to represent any interval or combination of intervals so far as the circumference of the plates would admit. This limit might of course be readily enlarged by increasing the circumference or by constructing two or more pairs of plates each with one uniformly distinct series of notches all the way round. Upon the upright iron beam which supports the shaft of the drum, was fastened a frame to hold large quill tooth-picks which were kept in position by a screw and clamp to play upon the slots as they rotated past. We could find no other substance which produces, when cut down to the proper form, clicks so sharp and distinct, even if the eyes or slots are very close together or the rotations very rapid, while offering so little resistance to the rotation of the drum. The upper part of the annexed cut (A) represents the screen and letters, and the lower (B) the simple apparatus for producing the clicks which we call a rhythmometer and which can be furnished by our University mechanic. When such an adjustment had been found that a semi-circumference filled with slots (*s*) moves under the quill (*q*) at exactly the same rate, measured by an electric tuning fork (*f*) of 50 vibrations per sec. on the drum above, as a semi-circumference with no slots,—*i.e.*, when the pressure of the quill producing the clicks did not retard the drum,—and when a mm. scale had been pasted under the points of the friction-wheel and the time-interval between two slots for each of several desired positions of the points determined once for all, observations could be begun.

A. Counting.

A number of cogs was set up by the operator (following no order of numbers) and one cog was put in as an *avertissement* at what seemed the most convenient interval of about $\frac{3}{4}$ of a sec., and the observer sought to count the clicks. The drum was allowed to revolve several times till he had attained a satisfactory degree of certainty, when the record was made and another number set up.

In the observations on which the Table on next page is based, the effects of fatigue are in large measure eliminated by beginning each series of observations with a small number of clicks, passing upwards, skipping from four to eight, to a maximum of two or three score clicks and then down again on the same numbers in inverse order and excluding all series which showed any considerable deviation. In this way from three or four to ten observations on each number (more on the small than on the

larger numbers) were made, of which only the averages are given in the Table and intermediate numbers above ten omitted. Two other intervals above and below those of the Table were used. The effects of practice are obvious. E. M. H., *e.g.*, on whom but one very incomplete record was made, was most in error, while J. J. and G. S. H., who made most records, are nearest right.

TABLE I.

Actual Number of Clicks.	ESTIMATED NUMBER OF CLICKS (Averaged).									
	Interval, 0.0895 secs.					Interval, 0.0523 secs.				
	G.S.H.	J.J.	H.S.	J.D.		G.S.H.	J.J.	H.S.	J.D.	A.G.B. E.M.H.
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	2.86	2.2	2	2.5	2
4	4	4	3.4	3.25	3.55	3.22	3	3.8	3.5	2
5	5	4.8	4.2	3.75	4.6	3.57	3.25	3.7	4	3
6	5.5	5.5	5	4	5.43	4.29	3	3.7	4	
7	7	6.1	5		6	5.5	3.5	5.8	4	
8	8	7	7	5.75	6.16	5.6	4.25	4	4	3
9	8.33	8	8		8.1	6	4	8	4.5	
10	9	8	8.1	7	8.2	5.7	5.2	5.8	6.25	
12	11.66	10.5	11	7.75	11	6.5	5	9	6	
16	16.5	14.7	9	11.5	15	10	7	11	8.7	4
20	18	17.8	13.2	15	19.7	11.25	9.2	8	10.2	5
25	22.5	23	17.5		20	13	10.1	12.2	11.7	6
30	29	27.4	24	20.5	23	15	12.5	18	16	8
35	33.3	33	27	20		20	12.5	11	17	
40	36.6	37	33	24.5		27	14.7	26		
45	41	42	43	26		32	17	30	21	
50			34.5	31.5		35	18	26.5	22	
55			49	34		39	21			
60			48	35.5		44	25		26.5	
65			57	41		47	23	25.5		

Counting objects and impressions is a very complex process and slow and hard to teach or learn. (1) The impressions in a series must of course be distinguished from each other. The ear, which does this most acutely of all the senses unless it be touch, can discriminate $\frac{1}{13.2}$ (Helmholtz) or even $\frac{1}{30.6}$ (Exner) of a sec. under exceptionally favourable conditions. These of course are extreme limits, but from 24 to 40 beats per sec. can be distinguished by the average ear without fusing into a tone. The actual number of beats is also a function; that is, in order that their discontinuity may be clearly perceived, four or even three clicks or beats must be farther apart than two need to be. When two are easily distinguished, three or four separated by the same interval approach nearer to the above limit and are often confidently

pronounced to be two or three respectively. It would be well if observations were so directed as to ascertain, at least up to ten or twenty, the increase required by each additional click in a series for the sense of discontinuity to remain constant throughout.

(2) Counting requires a series of innervations, if not of actual muscular contractions. So far Stricker is probably correct, uncritically as he overlooks other elements in the process. The most rapid contraction of antagonistic muscles in trilling by pianists who have given us their record, or the rapid lingual movements involved in aspirating the sounds *t*, *k*, recorded by a Marey tambour, we have never found to exceed and rarely to reach six double or twelve single contractions per sec., while few can make more than four or five double movements in that time. There is thus at any rate a wide interval between the most rapid innervations and the limit of discriminative audibility for successive sounds. Attention, in other words, discriminates sensation much more rapidly than the will can generate impulses. How this fact is reconciled with any extreme form of the hypothesis of the identity of apperceptive and volitional processes, it is not easy to see. No one would surely venture to assume that, because we can volitionally cut short the otherwise normal duration of a single innervation-impulse by innervating an antagonistic muscle, the extreme limit of distinguishing elements in a series of noises marks really the limit of this abbreviation.

(3) Counting involves the matching, pairing or approximative synchronisation of the terms in two series of events in consciousness. However familiar both series may be, this is difficult. Many school-children find it hard to keep step with others or to keep time with a drum or piano in marching, and savages have been reported to sight across each stick used as a counter at animals they were selling, to keep the correct tale. Even in registering transits, some observers record the instant the edge of the dancing star first touches the threads and others wait till it seems exactly bisected by it. Again, one anticipates the instant and practically eliminates his physiological time, while another admits it in full; hence the personal equation is far greater than can be accounted for by physiological or reaction-time. Wundt's ingenious observation upon an index moving across marks on a dial to simulate the transit of a star showed the great difficulty, if not impossibility, of identifying in time the perception of two really synchronous impressions on disparate senses. What now becomes of the lost clicks when we are constantly behind in counting, yet with great subjective assurance that we are right? It will hardly be sufficient to say that, when counting with great energy and concentration, we cease to attend to the auditory series, stretching the interval we caught the *tempo* of at the beginning of the series, as all short intervals are expanded when we come to perceive only our innervations. We may however conceive the earliest announcement of the impression of the first click in consciousness,

and the exit therefrom of the registry-innervation involved in counting it, as separated in time by some not inconsiderable proportion of the simple reaction-time from ear to tongue. If the interval between the clicks is greater than or equal to this reduced reaction-interval, consciousness is done with the first click when the second arrives, and there is no error. If, however, the second click begins to be recognised in the focus of consciousness before this has completely initiated the act of tallying the first, and if the fastest rate of doing so has already been attained, then the third click will come a little earlier in the process, until at length a click in the later afferent stage will cease to be distinguishable from the perhaps more widely irradiated process of the earlier efferent stage of tallying, and will drop out of consciousness and be lost, possibly after the analogy of the second of two sub-maximal stimuli in myological work, which produces no summation if extremely near the first in time. There is a disparateness between hearing clicks and counting, as there is between hearing the bell and seeing the index moving over the divisions of the dial, only it is of a different kind and perhaps degree; but the two acts are united in a "complexion" (Wundt), like all other impressions, if their apperception is simultaneous. If this be the explanation, we should expect that, in certain melancholia and other mental disorders in which the answer to the simplest question is delayed for perhaps a whole minute or more, this dropping out of successive sounds with great assurance that all are counted might begin at a much slower rate. But again the sense of manyness, which we get from the first two or three clicks, acts as a stimulus to us to bend all available energy to tally as fast as possible, and this concentration makes the sensation of the clicks dim. Thus it may be enough to simply say that, as we are unable to realise the different acuteness of the time-sense in the domains of different senses, so we fail to appreciate how wide the interval is between our power to hear and to count. We do not realise how far the fastest counting falls short of the fastest hearing. In judging of small divisions of time, we seem, as Vierordt thought, to take relatively large periods, perhaps even as great as our psychic constant (or the time we reproduce with least change)—so large at least that we can overlook it readily, and then pair or otherwise group the subdivisions which do not get into the field of direct time-sensibility themselves. The focus of apperception is perhaps dominated by the rhythm of the largest and more slowly loading and discharging motor cells. Although we can discriminate a finer intermittency by means of the smaller sensory cells, this is prone to be done more in the indirect field of consciousness, and these smaller moments of time speedily fall out of sense-memory into oblivion like knowledge or impressions not directly reacted on. If immediately known time be discrete, and temporal continuity be an inference, as seems likely, these finer temporal signs are some-

what analogous to the finer local signs discriminating motion and even its direction considerably within the ordinary limits of discriminative sensibility for stationary compass-points.

(4) Counting is more than tallying by ones; it is giving names to each position in a series of tallies. These number-names even below ten are of different quantity, difficulty of pronunciation, &c., and neither the effort nor time of innervation or of transition to successive names is uniform. The words one, two, three, can be brought out more easily and quickly than seven, eight, nine, even though the innervation is only just enough to enable us to keep place in the series. Generally this was not done (unless in the second series of G. S. H. in the Table) and probably cannot be done much quicker, to say the least, than the most rapid rates of antagonistic innervation even in the most skeleton pronunciations of them. If it can be, then counting ceases to be the real tallying or counting by ones. The lack of uniformity in the number-names makes the series of counts, unlike the smooth sensory series of clicks, so uneven that rhythms in the act are almost inevitable. Easier syllables are slurred over and harder ones made more prominent by means of the greater time or effort they require. Hence, in part, comes the tendency with most to count with a system of accents, on, say, the tens, fives, or perhaps twos. This too helps to make the exact matching, necessary to very rapid and correct counting, hard. The number-name is of course the last of these processes learned by the child. We have often found children of three or four years of age to bring "so many" blocks, if a number of actual things was pointed out, or even to beat "so many" times up to five, six or even eight, who did not know the number-names in order above two or three.

B. *Just observable Differences of Duration.*

Three equal intervals, each begun and ended by a click, and each interval separated from the next by a convenient term of about 1 sec., were set up on our apparatus. First the observer heard a click as a signal that the series was about to begin, then came the initial, and in, *e.g.*, 4.27 secs. the terminal click of the first interval; after a rest of about 1 sec. came the initial and then the terminal click of the next; and after another second's pause those of the third interval, all three intervals being equal in the first set of observations. Then the length of the middle interval was either increased, diminished or left unchanged, and the drum again set in motion; when it had reached its full uniform rate of rotation, the observer tried to tell in which sense, if any, the middle interval had been changed. He was allowed to hear the series but four times before judging. These conditions were of course very favourable for accurate judgment. After the series had been heard two or even three times, no impression of the relative length of the middle interval would often exist, and only after hearing the fourth and last

would the judgment incline to the *plus* or *minus* side. So, too, inserting the variable between two invariable and like intervals greatly facilitated judgment, which between two unlike terms is far less accurate. D. and S. made each twenty judgments when the middle interval was varied $\frac{1}{10}$ of the 4.27 secs. of the extremes, *viz.*, ten times each way with no error. G. S. H. judged ninety times under the same conditions with no error, while J. J. made only twelve errors in ninety judgments. When the variation of the mean was $\frac{1}{120}$ of the same time of the extremes, D. and S. made no errors in ten judgments, J. J. made three errors in forty judgments, and G. S. H. made two errors in thirty judgments. These latter judgments and the effort to 'hold time' which they involved were extremely fatiguing, and yet occasionally a judgment would be rendered with far less than the usual degree of attentive effort, and such judgments seemed hardly less likely to be correct than the most laboured ones with many muscles involved in the repressed but often quite compounded 'time-beats'. Confidence in the power to judge the finer intervals, or in the correctness of a judgment when made, diminished greatly as the differentiation required was hard, and surprise, when a short series was found at the end to be mostly correct, was almost invariable.

C. Full and Vacant Intervals.

A third set of comparisons was made. It is well known that if a horizontal line be bisected in the middle and one half untouched and the other half crossed by short regular perpendicular lines, the latter half will seem the longer. It was found that under certain conditions the same illusion held for the time-sense. The intervals are arranged as described in the preceding paragraph, only there are but two of them. Of these the first is set full of cogs which give a corresponding number of clicks, as they pass under the quill. In this case the illusion was invariable. Full tables were constructed for four individuals. With 10 clicks the following vacant interval to be judged equal to it must be extended to the time of 14 to 18 clicks. 15 clicks seemed equal to the time of from 16 to 19. Preliminary experiments upon other individuals indicate that these differences are extreme. If the absolute length of interval is increased beyond from 1 to 3 secs., the illusion is less. It is also less if the clicks are very near together. The illusion still holds, but is diminished, if, instead of comparing clicks and a vacant time, more or less frequent series of clicks are compared. In these observations also, the time between the two intervals became quite important. In general the illusion was less if this time was short, but if less than about $\frac{3}{4}$ of a sec. the illusion again became greater. Indeed in a few cases an indifference-time was found in which little or no illusion took place. This entire illusion, however, is reduced to a minimum, and with some persons vanishes, if the order of the terms be reversed, *viz.*, if the vacant or less-filled interval precedes.

THE TIME IT TAKES TO SEE AND NAME OBJECTS.

By JAMES McKEEN CATTELL.

The relation of the sensation to the stimulus and the time taken up by mental processes are the two subjects in which the best results have been reached by experimental psychology. These results are important enough to prove those to be wrong who with Kant hold that psychology can never become an exact science. It would perhaps be convenient to call the work done by Weber, Fechner and their followers in determining the relation of the sensation to the stimulus Psychophysics, and to confine the term Psychometry to the work done by Wundt and others in measuring the rapidity of mental processes. Psychometry seems to be of as great psychological interest as Psychophysics, but it has not been nearly so fully and carefully worked over. This is partly due to the difficulties which lie in the way of determining the time taken up by mental processes. Such a time cannot be directly measured; the experimenter can only determine the period passing between an external event exciting mental processes and a motion made after the mental processes have been completed. It is difficult or impossible to analyse this period, to give the time required for the purely physiological operations, and to decide what mental processes have taken place, and how much time is to be allotted to each. Experimenters have also met with two other difficulties. The physical apparatus used seldom produces the stimulus in a satisfactory manner or measures the times with entire accuracy, and must be so delicate and complicated that it requires the greatest care to operate with it and keep it in order. The other difficulty lies in the fact that the times measured are artificial, not corresponding to the times taken up by mental processes in our ordinary life. The conditions of the experiments place the subject in an abnormal condition, especially as to fatigue, attention and practice, and the method has often been such that the times given are too short, because the entire mental process has not been measured, or too long, because some other factor has been included in the time recorded. Considering therefore the difficulty of analysing the period measured, the inaccuracies of the recording apparatus, and the artificial and often incorrect methods of making the experiments, we have reason to fear that the results obtained by the psychologist in his laboratory do not always give the time it takes a man to perceive, to will and to think. Wundt has done much toward obviating these difficulties, carefully analysing the various operations, and improving the apparatus and methods. It has seemed to me, however, worth the while to make a series of experiments altogether doing away with involved methods and complicated apparatus, and looking to

determine the time we usually require to see and name an object, such as a letter or a colour.

(1) I pasted letters on a revolving drum (a physiological kymograph) and determined at what rate they could be read aloud, as they passed by a slit in a screen. It was found that the time varied with the width of the slit. When the slit was 1 cm. wide (the letters being 1 cm. apart) one letter was always in view; as the first disappeared the second took its place, &c. In this case it took the nine persons experimented on (university teachers and students) from $\frac{1}{3}$ to $\frac{1}{2}$ sec. to read each letter. This does not however give the entire time needed to see and name a single letter, for the subject was finding the name of the letter just gone by at the same time that he was seeing the letter then in view. As the slit in the screen is made smaller the processes of perceiving and choosing cannot so well take place simultaneously, and the times become longer; when the slit is 1 mm. wide the time is $\frac{1}{2}$ sec., which other experiments I have made prove to be about the time it takes to see and name a single letter. When the slit on the contrary is taken wider than 1 cm., and two or more letters are always in view, not only do the processes of seeing and naming overlap, but while the subject is seeing one letter, he begins to see the ones next following, and so can read them more quickly. Of the nine persons experimented on four could read the letters faster when five were in view at once, but were not helped by a sixth letter; three were not helped by a fifth and two not by a fourth letter. This shows that while one idea is in the centre, two, three or four additional ideas may be in the background of consciousness. The second letter in view shortens the time about $\frac{1}{40}$, the third $\frac{1}{60}$, the fourth $\frac{1}{100}$, the fifth $\frac{1}{200}$ sec.

(2) I find it takes about twice as long to read (aloud, as fast as possible) words which have no connexion as words which make sentences, and letters which have no connexion as letters which make words. When the words make sentences and the letters words, not only do the processes of seeing and naming overlap, but by one mental effort the subject can recognise a whole group of words or letters, and by one will-act choose the motions to be made in naming them, so that the rate at which the words and letters are read is really only limited by the maximum rapidity at which the speech-organs can be moved. As the result of a large number of experiments the writer found that he had read words not making sentences at the rate of $\frac{1}{4}$ sec., words making sentences (a passage from Swift) at the rate of $\frac{1}{8}$ sec. per word. Letters not making words were read in $\frac{1}{40}$ sec. less time than words not making sentences; capital and small letters were read at the same rate, small German letters slightly and capital German letters considerably more slowly than the Latin letters. The experiments were repeated on eleven other subjects, confirming these results; the time required to read each word when the

words did not make sentences varying between $\frac{1}{4}$ and $\frac{1}{2}$ sec. When a passage is read aloud at a normal rate, about the same time is taken for each word as when words having no connexion are read as fast as possible. The rate at which a person reads a foreign language is proportional to his familiarity with the language. For example, when reading as fast as possible the writer's rate was, English 138, French 167, German 250, Italian 327, Latin 434 and Greek 484; the figures giving the thousandths of a second taken to read each word. Experiments made on others strikingly confirm these results. The subject does not know that he is reading the foreign language more slowly than his own; this explains why foreigners seem to talk so fast. This simple method of determining a person's familiarity with a language might be used in school-examinations.

(3) The time required to see and name colours and pictures of objects was determined in the same way. The time was found to be about the same (over $\frac{1}{2}$ sec.) for colours as for pictures, and about twice as long as for words and letters. Other experiments I have made show that we can recognise a single colour or picture in a slightly shorter time than a word or letter, but take longer to name it. This is because in the case of words and letters the association between the idea and name has taken place so often that the process has become automatic, whereas in the case of colours and pictures we must by a voluntary effort choose the name. Such experiments would be useful in investigating aphasia.

A more detailed account of these experiments, and of the methods used, will be found in Wundt's *Philosophische Studien*, ii. 4.

VI.—DISCUSSION.

FEELING AND EMOTION.

By H. M. STANLEY.

As Prof. Wundt well remarks, the chapter on the Feelings is one of the darkest in the history of psychology, and Dr. Nahlowsky speaks of the feelings as a world the entrance to which is as dark as that of the Hades of old. Prof. Wundt gives three divisions of psychologists with respect to their treatment of the feelings: first are those who have treated feeling as the deepest activity of the cognitive faculty; second, those who make feeling depend on "interaction of presentations"; third, those who emphasise feeling as subjective complement of "objective sensations and representations". The fundamental distinction is, however, deeper than these distinctions with reference to the relation of knowledge and feeling; it is that of spiritual and physiological treatment.

Psychologists as a whole are divided into the two schools, physiological and spiritual, and the treatment of the feelings varies most manifestly between them. The one school emphasises the objective side, the other the subjective. The physiological school relates all feelings, higher and lower, to the organism; while the spiritualistic school connects the lower feelings with the organism, but the higher, as love of truth, &c., are related only to the spiritual nature. With the physiological school, feelings are merely the subjective side of objective changes, are determined by the objective; with the spiritual school, subjectivity perceives and determines objectivity. With the physiological school there is a hard and fast pre-established harmony of subjective and objective changes, but the subjective face is incidental concomitant or function of the objective; with the spiritual school, all is ideal and subjective, or at least the subjective moulds the objective and expresses itself in the material.

What is the nature of an emotion? Most psychologists are content to simply refer us to our own conscious experience, as Messrs. Bain, Allen and Thompson. Mr. Spencer seeks to go deeper. All states of consciousness are divided by him into feelings and relations between feelings, which last mean, of course, as he admits, relational feelings. Every state of consciousness is such by virtue of its having a relational or cognitive element. Some states are more relational than others, but none are absolutely non-relational; thus the sense of smell is less relational than that of sight, but still to some extent relational. Every feeling is thus feeling of something and has cognitive value. The non-relational element is feeling proper, and may be sensa-

tion—peripherally initiated, or emotion—centrally initiated. This physiological definition does not clear up the psychological nature of emotion. Mr. Spencer mixes up physiological and psychological classifications. After dividing physically into peripherally and centrally initiated, he then divides these transversely into actual and ideal, or vivid and faint, or presentative and representative. If mind be built up, after the Humist fashion, of impressions and ideas, it is evident that the fundamental psychological division is this into presentative and representative (at any power). The emotions belong to the latter class.

We are now led to ask, What is the essence of feeling as such, whether emotion or sensation? What makes feeling, feeling? and the answer is, as we have seen, the negative distinction of non-relational. If with Hamilton and Mr. Spencer we emphasise the nature of feeling as subjective and non-relational, it seems evident that the growth of mind has been from an almost complete subjectivity of feeling to a very considerable degree of objectivity in perception. We may believe with Mr. Spencer in the subject-object nature of all consciousness, and yet insist on this law of the growth of mind, which is, perhaps, noticed by Mr. Spencer only indirectly in his discussion of correspondence. In the lowest forms of consciousness, as seen in low forms of animal life, consciousness is, no doubt, maximum of subject and minimum of object. There is probably but little localisation of feeling, pain and pleasure being mostly organic. The externality of its body is but vaguely known, if known at all, and externality beyond is not recognised. We view our hands as in a measure external; the lowest animal feels its body as itself, does not in proper sense perceive its body. Its consciousness is, as it were, part and parcel of matter, and it is only in higher forms that consciousness rises to a perception, to a knowledge of itself over against object. In the progress of mind feeling decreases, cognition increases, till, as in scientific human eyesight, perception becomes almost pure from feeling.

Mr. Spencer is inclined to believe that each state of consciousness as subject-object relation is compounded of the feeling and the relational element, knowing; but it seems rather more probable that in the final analysis feeling and knowing are to be considered as closely consecutive states, feeling being precedent in the order of evolution. The subjective is first wakened—first feeling, then knowing. The earliest stages of psychical life in the young of the human species and higher animals is almost purely organic sensation, perception rising later, and we judge that the history of the individual is indicative of the history of the race. At least we may say this, that the earliest psychical life is prevaillingly that of feeling, because perception, if it in any true sense occurs, is speedily obscured by feeling leading to the action demanded in the struggle for life. The necessary immediacy of reaction in presence of environment in early life is secured only through

feeling as stimulating will. Feeling, as the egoistic, personal and subjective determination of mind, must increase according to law of self-preservation ; but, while the subjective bearing must always be kept in mind by the element of feeling, still the law seems to be—that immediate personal reaction, impulsiveness, is relatively unsuccessful, and the objective side of mind, the intellectual, tells most in the conflict of life, though this becomes useful only through the element of feeling. Feeling in the progress of mind then takes up less and less space and time in consciousness, and the objective relational element more and more space and time ; but feeling always remains as deep and determining factor. The evolution of intense personalities can only be through subjectiveness of feeling. Dr. Nahlowsky, while emphasising feeling as subjective and knowledge as objective elements, would make will subjective-objective element of mind. But it is evident that will and feeling belong together as subjective. Will is subjective-objective only as it is teleological, or involves knowledge ; but this is true of most determinations of developed consciousness—whether volitions or emotions.

We cannot then, perhaps, reach a deeper analysis than this—to consider feeling as subjective element in consciousness ; but we may inquire in what form feeling is primitive. Pleasure and pain have been considered primitive by many psychologists, and all feeling may be considered as developed pleasure and pain. Mr. Spencer views pleasure and pain as concomitants of emotions, and not the emotions themselves. But it seems more correct to regard pleasure and pain as primitive and fundamental feeling, out of which through differentiation by knowledge proceed all feelings. Psychical life in its lowest forms seems to be mainly pleasure and pain simply as such, without perception of the pleasurable and painful. There is merely pleasure and pain, and not the pleasurable and painful. Pleasure and pain appear in all feeling, and, as far as there is subjective reference, throughout all mental life, although often almost hidden in consciousness. There is, indeed, mathematically considered, an indifference-point where pleasure and pain meet, but psychologically considered every state of consciousness is to be characterised as pleasurable or painful. Feelings may be apparently and in the popular sense of the word indifferent, but never so psychologically and scientifically indifferent as Prof. Bain claims. Careful analysis will, we think, show that absolute indifference is nowhere to be found in consciousness. The subject always has a certain tone, which, whether distinctly recognised or not, remains as an essential element of consciousness. That pleasure and pain seem concomitant to emotions, arises from the fact that most, if not all, the feelings in developed consciousness, to which we naturally refer, are very complex. Anger, so far as it is feeling, is pain, to which is added the will-element of hostility and a quite distinct perception of object of the anger. How much know-

ledge enters into our common conception of emotion is negatively evident from the phrase 'blinded by passion' which is applied to one who has almost lost the relational element from consciousness. Emotions in the higher stages are filled out by knowledge and will, but if we extract the pure feeling from any given emotion, we can have as mere subjectivity only pleasure and pain. When objects come clearly before the mind, the accompanying pain or pleasure is recognised in memory as coloured by the object, by knowledge. We feel pain differently through perception by eye and ear; but where there is no eye or ear, distinctions of this kind must disappear. And so we recognise that psychical life is at bottom and in its earliest forms simply pleasure and pain with little or no differentiation from objects. Developed psychical life perceives, feels, wills; undeveloped psychical life feels, wills, perceives. The unfeeling stone is not roused to self-preservation by feeling, it passively endures its fate. The animal, however, through feeling reacts by locomotion or self-defence and preserves itself. Thus by virtue of feeling there exist in nature active beings which have a worth of being in themselves.

Feeling then, we conclude, is the purely subjective factor in consciousness; and *per se*, both as developed and undeveloped, is merely pleasure and pain. The older psychologists, as Spinoza and Leibniz, were inclined to view the feelings as inadequate or confused ideas. This view was easily suggested by the fact that in intense subjectivity of feeling perception is obscured, but this does not help us to any clear conception of the nature of feeling, which is best gained through studying the history of mind. We will now consider some aspects of the perplexing subject of Emotion and its expression.

Theories of expression are plainly divisible according to the method of treatment by spiritual and physiological schools respectively, according as the relation of mind to body is regarded as initiative, or as concomitant or resultant. Expression in literal significance, according to common opinion, and as urged by the spiritual school, is subsequent on, and determined by, emotional consciousness. It is the bodily *expression* of mental action. With the other school the physiological factors are the determining ones. Descartes viewed the passions as reactions from the body. Expression is connected with physical support by Prof. Bain. Prof. James makes feelings reflexive movements in consciousness due to the so-called expressions. Hamilton makes feelings of pleasure and pain reflexive, not only, however, of impeded or unimpeded bodily movements, but also and primarily of impeded and unimpeded conscious activities, and he belongs then rather to the spiritual school. Mr. Grant Allen has extended the physiological explanation to the feeling of beauty, and intimates that all the higher feelings have their true philosophy in this point of view. Prof. Wundt views feelings as reactions from sensation.

Prof. James's theory (MIND XXXIV. 188) is that expressions, instead of being determined by the emotions, determine them. We do not strike because we are angry, but we are angry because we strike. This involves the general theory that body not mind is determining factor; that emotions, &c., are merely subjective side of objective changes. The opposite theory is that the expressions, neural changes, &c., are but objective side of subjective changes, *e.g.*, of emotions. From the point of view of consciousness we speak of expressing our emotions, but from the real point of view, according to Prof. James's theory, we should speak of emotions being expressions in consciousness of our bodily activities. This is a thorough and logical carrying out of the physiological point of view, which should emphasise not only nerve-states as objective support of conscious states, but also muscular and organic states. Mind as series of subjective changes finds its objective support in body as a whole, and not in nerves merely. To consider this general attitude of thought would call for too extended discussion. It is sufficiently evident that, approaching from the objective physiological side, this treatment of emotion as concomitant and resultant of not only neural but general bodily activities, known from the psychological point of view as expression, is inevitable. Let us notice this position, however, from the point of view of consciousness.

Prof. James points to the fact that exercising the expressions or imagining the feeling calls up the feeling, as a proof of his theory. This, however, is merely a matter of association, and can prove neither a real precedent nor resultant. We may call up ideation as well as emotion by producing associated activities. In the interdependence of the conscious life, emotion, perception and willing call up each other without reference to causative order. Any one element of consciousness may be regarded either as resultant or stimulant according as we look at preceding or following state of consciousness. In the order of evolution, pain and pleasure arise from certain actions to inhibit or stimulate repetition of actions. Feeling is then both resultant and stimulant. The emotions may arise from the expressions by association, but the original dependence is that of expression on emotion. The further test, that we cannot imagine an emotion without bringing in bodily presentation, is simply a necessity of imagination as such, and due to association and organisation.

In common language emotion is made precedent to expression, and this is the psychological standpoint. We speak continually of venting anger, giving expression to feeling, giving way to our emotions, &c. The will represses, expresses or impresses emotions. When the bodily expression is not allowed there is rankling, when repressed thoughtfully and measurably there is repression, of emotion; when expression is allowed in measure there is relief, when expression is uncontrollable there is exhaustion; when an emotion is desired, the will by repeating known

expressions may impress emotion into its forms. Simulating expression is the actor's art; but when the simulation is forgotten by either actor or audience, nature appears and art disappears. Simulation of expression leads easily to feeling and to natural expression by the principle of association. Emotion may then be directly stimulated or repressed, or indirectly through expression. Excitement may be stopped by mental measures or by deep inhalations. Expression may be expressive to the individual and not to others, for example, when the heart jumps into the throat; to others and not to the individual, as very often in the knitting of the brow; to both, as in gesture.

Darwin relates emotions to expression by three principles: first, principle of survival, or as he terms it, "serviceable associated habits"; second, principle of antithesis; third, principle of direct action of nervous system. The evolutionary principle of survival bids fair to be a very important factor in explaining expressions. According to this principle we seek to explain many expressions by studying their history, and many expressions are then found to be what we may term degraded actions. When feeling arises, the old associated actions, now disused, tend to follow as survival in degraded form. The running from feared object was for self-preservation, and this running, of course, accelerated the action of the heart and connected organs, with depression of more remote organs. The throbbing of heart, &c., as expression of fear, are then survivals of the running of generations of ancestors. We may remark in this connexion that expression as partial may act in accumulatory manner, as when in fear there is throbbing of the heart, which acts, not in serving the limbs as originally, but in adding to mental excitement. Sufficient attention has not, perhaps, been paid to what we may term the negative or passive expressions which are due to excessive withdrawal of blood from certain organs by other organs for active expression. Emotions in any high degree almost always enhance some function to the depression of others. Just why there should be the particular depression, must be determined by physiological research. Pallor from fear may be regarded as a negative expression. Darwin enumerates as unexplained expressions, "change of colour in the hair from extreme terror or grief—the cold sweat and the trembling of the muscles from fear—the modified secretions of the intestinal canal—and the failure of certain glands to act". (*Expression of the Emotions*, 350; but cp. 81.) It may be that some or all of these are negative or secondary expressions, due to abnormal lowering of certain functions through abnormal heightening of other functions in primary and positive expression. It seems to us at any rate that this distinction of positive and negative expressions is worthy to be made and may be useful.

If many expressions of emotion are degraded actions in survival, it is plain that the emotion cannot be the reflex of the

expression. The expression, on the other hand, is the reflex or result of the emotion; it is the survival of the associated past actions which were originally consequent on a given emotion. This law of survival accounts for much that Prof. James seeks to account for by his theory; it gives account of the expressions not as causative, but as identifying them with common actions. To be consistent then, Prof. James must make all actions determine emotions, since expressions are reduced to actions. His theory is the reverse of Mr. Spencer's by making emotions peripherally not centrally initiated.

This leads us naturally to consider Darwin's third law, the principle of superfluous energy issuing in expressive actions, which is also insisted on by Prof. Bain and Mr. Spencer. If expressions are resolved into actions, the law of action, efflux of energy, is the law of expression. If actions be viewed as centrally initiated, we know that there must be accumulation of nervous energy sufficient to discharge itself along muscles, &c. Nervous energy, as the concomitant of mental excitement, will, says Mr. Spencer, discharge itself along lines of least resistance, along the smaller muscles and those most habitually used. From the latter law arise what we may term individual expressions, due to the habits of the individual; for example, under slight nervous tension one man will move his legs, another his arms. Emotions then lead often unconsciously and in a motiveless manner to usual activities. The term 'expression' had best, we think, be distinguished from action in the proper sense. A man may be walking fast from excitement, and the walking would then be called an expression; but the running of a man to catch a train would hardly be called an expression. Teleological action is then set off from expression. But unteleological action cannot always be termed expression, so far as it is merely instinctive, and not indicative of conscious life at all. Expression is an indefinite region between instinctive and teleological action; it is action, but degraded action of the survival or habitual type.

Darwin's second principle, that of antithesis, is in reality not a principle, but a fact. We act in expressing emotion in opposite ways, not because the ways are opposite, but inevitably from opposite stimuli. It is merely a natural fact that opposite emotions find opposite expressions. A principle of likeness would on the same basis be required, but this like that of antithesis is a fact, not a principle.

Prof. Bain insists upon three principles of expression—spontaneity, diffusion, and pleasure and pain. Spontaneity is to be taken into account by way of subtraction from expression. A man in delirium manifests a great variety of movements which are not expressive, because there is nothing to express. In the play of children there is overflow of nervous energy into natural channels, but the movements are not properly expressive. Prof. Bain maintains that in joy, for instance, this element must be

subtracted in order to gain the amount of real expression. It may be necessary to subtract on the principle of spontaneity, but not we think as unexpressive. Play is expressive of the emotion of high spirits, and is to be subtracted from the expression of joy with which it is often associated. Spontaneity is not a principle then of the relation of expression to emotion, unless it be called a principle that various emotions and expressions are often very closely associated, and the value of each must be determined by analysis and by the subtraction of the others.

The principle of diffusion is the principle of surplus of nervous force which is insisted on by Darwin and Mr. Spencer. The principle of pleasure as the enhancement of function, and pain as the depression of function, Prof. Bain declares to be fundamental in determining expression. He opposes Mr. Spencer's law that intensity of expression is as intensity of feeling, by modifying the word feeling with the word pleasurable. That the character of the feeling as pleasurable or painful should affect very deeply the character of the expression is to be expected according to evolution. Pain will produce contractive, defensive, remedial measures; pleasure, expansive measures. This is implied in the view of expression as degraded action. Again, actions following from pains or from pleasures would be antithetical; and thus Darwin's principle of antithesis is easily placed by Prof. Bain. That which injures the organism produces pain, but this pain is reflex from the organism, and the functional derangement is cause, not expression, of feeling. Now actions are put forth upon the stimulus of this painful feeling, and these actions may become expressions. This functional depression, causative of the feeling, is, perhaps, confounded by Prof. Bain with expression. Pain is accompanied by functional derangement—not necessarily depression, as Prof. Bain emphasises—in the part from which pain arises, but this is not to be confounded with expression proper. Pain is often stimulant to the organism as a whole, lifts the tone of the organism, as in the cut of a whip, although there be derangement in single part at the skin. The painful feeling and the pleasurable alike express themselves by intensity, local or general, not by depression, for only thus can there be positive and hence negative expression. There must be an arousing of nervous energy in order to any expression. Thus Mr. Spencer's law is applicable. The general law of expression is simply that conscious state as feeling is stimulant and directive of action whether the feeling be pleasurable or painful.

Prof. Bain tends to look upon expression, not as we have treated it, as consequent of conscious state, but as "incidental to physical support" (*Senses and Intellect*, p. 704). But physical support as basis of conscious states is to be carefully distinguished from *expression*. Feeling, as conscious state, has a physical substratum and it has an expression. The expression is properly that action which

has been, is, or may be under the control of the will. The angry man may be angry and restrain expression, but, as long as he is angry, there will be a certain physical substratum of the mood, a certain state of the nerves and of the cerebral circulation.

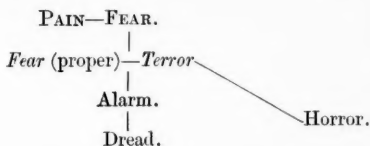
We shall notice in conclusion the subject of the Classification of the Emotions. The feelings—and we have used the term emotions as in general synonymous—have been most variously divided. Spinoza in the *Ethica* develops a classification from the primary feelings, pleasure, pain and desire, through modification by the inadequate, the rational and the intuitive ideas. Hamilton grounds his divisions of the feelings on his divisions of the other powers of the mind, for feeling is with him mere adjunct of other powers, contemplative and practical. Dr. Nahlowsky divides into simple and complex, and also into active and passive. Mr. Spencer divides variously, “as central or peripheral, as strong or weak, as vague or definite, as coherent or incoherent, as real or ideal” (*Psych.* i. 272). He adds agreeable and disagreeable feelings; and works out the distinction of real and ideal into presentative, presentative-representative, representative, re-representative. This purely psychological classification gives the order of evolution of feelings in a very general way, but Mr. Spencer enters upon no detailed examination of the feelings. Prof. Bain claims to be in substantial agreement with Mr. Spencer, but his eleven genera appear rather heterogeneous and only in a vague way evolutionary. Mr. Spencer (*Essays*, ii. 120) approves of Prof. Bain’s idea of a natural-history classification, but points out that Prof. Bain has not worked out the ideal, giving merely a “descriptive psychology”: a true evolutionary classification should be founded on study of “the evolution of the emotions up through the various grades of the animal kingdom,” study of “the emotional differences between the lower and higher human races,” and lastly, by observing “the order in which the emotions unfold during the progress from infancy to maturity”. It is much to be regretted, however, that Mr. Spencer has not taken up the emotions in detail. He has given us mere rough divisions, not a classification.

Mr. Mercier’s classification, as worked out in *MIND* XXXV.-VII., is very elaborately and carefully done. He gives a more thorough natural-history classification than any which has yet been set forth, giving classes, sub-classes, orders and genera. Many of the Tables are very ably worked out, but it would not be hard to criticise. Table iii. is particularly suggestive, but it may be doubted whether certain of the feelings, as Courage and Sense of Victory, always have relation to self-conservation. Again many higher and late developed feelings creep into the earlier Tables, as Resignation and Meekness into Table iii., which is somewhat like putting the cat among the radiates. We, of course, recognise that late forms may belong to early types, but this will not

account for such instances as these. In Table ii. the grand division is according to agent and event, but in low forms of psychical life there is no such thing as event—all is animate. In this and other Tables it is evident that Mr. Mercier has taken on the whole a statical rather than an evolutionary point of view. The classification is primarily logical and descriptive rather than genetic. Again feelings which are nearly akin in essence and expression are separated; as, for example, it is to be doubted whether Terror, Horror and Dread should be respectively assigned to different genera.

It may be a question how far a natural-history classification can be applied to psychological matters. If it be the true method, we must apply it throughout to all forms of consciousness, and if, as we have contended, feeling as feeling is only pain and pleasure, is pure subjectivity, but is differentiated through knowledge and will, then the classification of the emotions is dependent on the classification of the cognitions and the volitions. We are not inclined to accept Hamilton's classification formed on this principle, because it is not evolutionary. Knowledge is mingled with most of the feelings as treated by Mr. Mercier, and his method of classifying by object of feelings emphasises this; but, however valuable and suggestive, his classification remains faulty in content, method and form. It is faulty in content primarily because it does not have regard to psychological classification as a whole, without considering which it is as impossible to come at satisfactory results as if we should attempt to classify vertebrates by themselves. As all animals constitute a kingdom, the whole of which must be kept in mind by the classifier, so states of consciousness constitute such a whole, such a unit, that the classifier must attack all psychological states in order to form a satisfactory classification of any one group, as emotion. The method also does not make sufficient use of comparative psychology. The nearest approach to a truly evolutionary form in classification is, perhaps, that modification of Prof. Huxley's, which Mr. Spencer sketches in his *Biology*. Mr. Mercier's classification, as it lies, is linear, but the Tables, the author insists, must be combined in imagination into a tree-like form. Just what this form is, it is rather difficult to carry in mind, and it is to be hoped that Mr. Mercier will sketch it out in full.

We may illustrate roughly our notion of what a classification of the Emotions might be in this manner.



It has been urged that pleasure and pain make up feeling as feeling. The first differentiation of Pain is through cognition of object painful. This state is Fear. Difference in intensity is developed very early, so we have Terror and Fear proper. Cognition of time soon differentiates—under immediate form as Alarm and under more distant form as Dread. Far later Horror as altruistic form of terror will arise. We merely give this as an approximate illustration of the correct form and method of evolutionary classification. The development of mind as a whole must be followed. Pleasures and Pains would appear as the two great correlated classes into which the emotions would divide, and each would in interdependence be differentiated by the forms of cognition and volition as these severally arise.

MR. MERCIER'S CLASSIFICATION OF FEELINGS.

By CARVETH READ.

A plan of classifying the Emotions, or rather of providing a substitute for such a classification, had occupied me for some time, when there appeared in *MIND* a series of remarkable and in many ways admirable articles on the Classification of Feelings by Mr. Mercier: articles of such excellence that it would have been absurd to proceed with what I had to say without some examination of them. And whilst the publication of my own notions is still unavoidably postponed, it seems best to print at once the following controversial matter. Mr. Mercier begins by professing a general adherence to Mr. Spencer's psychology, and to the principle of Evolution; but, finding some fault with that philosopher's classification of Feelings, he proposes to set forth another more in accordance with the rest of the system. The objections he raises against Mr. Spencer's doctrine as expounded in *Psychology*, § 480, must be allowed, I think, to have some foundation in the text. He shows that the same feeling, Terror, may be classed as Presentative-representative, Representative, or Re-representative; and that feelings so different as Blueness and Triumph seem to be sometimes included in one class (*MIND* XXXV. 326-8). Confining attention to § 480, these objections seem pertinent; but this leads me to make three remarks. First, Mr. Spencer in classifying feelings has not resorted to as much abstraction as he might legitimately have done, but has rather dealt with total states of consciousness. Thus Terror at sight of a snake, Terror at thought of a snake, and Terror without definite occasion on going into the dark, seem, as Mr. Mercier points out, to be placed in three different classes. But surely the element of Terror is the same in all these cases; and, as to the ancient essential body of it, is in each case of the same degree

of representativeness. Secondly, Mr. Spencer has unfortunately omitted in this passage to remind his readers of the distinction (prominent enough in earlier sections) between feelings peripherally and centrally initiated. This distinction of course traverses those that have respect to representativeness, and had Mr. Mercier remembered it he would not have thought Mr. Spencer unable to separate Blueness and Triumph; for, when both are representative, Blueness is definitely representative of one sort of peripheral feeling, whereas Triumph (though, in its several elements, remotely) is not as a whole definitely representative of any peripheral feeling. It would be well, I think, to make the distinction of Peripheral and Central Excitation fundamental, and ground that of Representativeness upon it. Blueness and Triumph would then appear to be separated not merely by specific difference, but as belonging to different orders. Thirdly, what I have just said must occur to any one who reads § 480 by the light of § 481. For we there learn that the chief value of Representativeness as a principle of the classification of states of consciousness, arises from its generally implying corresponding degrees of integration, definiteness and complexity. Now this is, no doubt, true in some sort of either peripherally or centrally excited feelings in classes severally, but not if we take them together. The power of sustaining the feeling of Blue in idea implies a greater integration of consciousness than does the feeling of Blue from immediate stimulus; but is the idea of Blue to be compared with Terror in respect of integration and complexity? To compare the two great orders of peripherally and centrally excited feelings with respect to definiteness seems merely inappropriate: since in the former case definiteness is understood of comparison or relationality; in the latter it means speciality of impulse or of the control of conduct.

The explanations of Mr. Spencer's doctrine which I have now offered will, I hope, serve to parry Mr. Mercier's objections to it; and, by way of a general excuse for the criticisms which I purpose making upon the latter author's classification of feelings, I may say that Mr. Spencer's classification seems to me, as far as it goes, a more natural outgrowth of his own system and of the principle of evolution. Mr. Mercier complains (p. 329) of Mr. Spencer's not explicitly expressing the emotional element of mind in terms of the correspondence between the organism and its environment (though he admits that this seems to be taken for granted), and consequently of classifying feelings "from a standpoint mainly subjective". But this is hardly just. The terms Presentative-representative, Representative, Re-representative have an objective reference. They denote stages in the growth of feeling, accompanying the organisation of cognitions, during the extension and increase of the correspondence (between minds and the world) in space, time, speciality, generality, complexity, as set out in *Psych.*, Part iii. Bearing this in mind, we shall easily detect

an error in Mr. Mercier's first principle, which will explain most of the shortcomings in his classification. "Feeling," he says (p. 331), "is the correspondence of states in the organism with interactions between the organism and the environment." Feeling then "must vary as this interaction varies, and it must be possible to obtain a classification of feelings from a classification of the actions". Now, waiving other remarks that might be made upon this statement, we must observe that it omits a most important qualification. It should be enlarged as follows (to begin with his own words): "It must be possible to obtain a classification of feelings from a classification of the interactions" *in all their degrees of extension in space and time, and in all their possible combinations special, general and complex.* Whoever refers to Mr. Mercier's classificatory Tables may judge how far they realise such a principle as this. From them we might suppose that the forces of the environment only approach the organism in single file; that the organism deals with the environment by a series of uncoordinated movements; and that our feelings, just as distinct and structurally on a level, pair off with these interactions. But surely the conduct of life is not so easy, and we are not so simple-minded.

Taking the above principle as amended, observe its impracticability. All the interactions of organism and environment, in all degrees of remoteness and combination, would be hard to classify in any detail; and if they were so classified we could not presume that corresponding with every member of the classification there would be recognisable a variety of feeling. Accordingly, whilst keeping in view (as Mr. Spencer has done) the objective reference of feeling, the basis of any treatment of the feelings (whether a classification or some substitute for one) must be subjective. We must begin with the feelings as given by introspection; and, having made a first distribution of them according to their apparent agreements and differences, we must let them guide us to the circumstances of their origin and growth; whence we may learn further and better particulars to correct our first impressions. Of this work a good deal has been done already, partly as usual by common sense, partly by scientists. We have not to build a new house on a sand-patch of our own reclaiming, but to lend a hand to the workmen upon a public edifice.

If the application of Mr. Mercier's principle according to its complete statement is impracticable, what are the results of working it out in the imperfect form which it has in his articles? Let me begin by drawing attention to some improvements that might perhaps be made in his classification without regard to its principle. And, first, some alterations seem desirable in naming the feelings themselves. Feelings that are excited by interactions differing only in degree of energy, whilst similar in kind and in circumstances, usually themselves differ only in degree, and should be designated accordingly. Thus in Table iii. (p. 345)

Hate, Fear, Terror, would be better called Fear of the 1st, 2nd, 3rd degree; Suspicion, Apprehension, Hope, would be better as three degrees of Apprehension; Mortification, mentioned twice, Defeat, Despair, as four degrees of Defeat. Other similar cases might be shown, but these will serve to illustrate my meaning. The adoption of this plan of naming would further facilitate the avoidance of unsuitable names. Hate is very unsuitable for the 1st degree of Fear, being at least as much akin to Anger, and moreover no mere transitory feeling, but a settled affection or disposition to irascible feeling of peculiar character. Suspicion, too, is properly a feeling that arises not so much from the uncertainty of a cognition in regard to a noxious agent as from a belief in the cunning and secrecy of its attack. And what shall we say to Hope as aroused by the uncertainty of the cognition of an overwhelming noxious agent? Several other names in Table iii. alone seem ill-chosen—as Resignation, Courage, Mortification, Meekness, Resentment, Contempt, Scorn.

Again, some Feelings are misplaced, of which the worst case is that of Religion (MIND XXXVII. 17), classed amongst feelings corresponding with interactions neither conservative nor destructive, as genus 4—"the relation of the organism to the unknown". Surely this is following Mr. Spencer where he is least to be followed. Even granting the soundness of his argument in *First Principles*, Part i., it must still be remembered that feelings respond not to facts but to cognitions, and that the religious object has very rarely hitherto been cognised as unknown. The place of Religion seems to be amongst the first order of Social-conservative emotions of Table i. (p. 4); where in fact we find Piety, though in what exact sense is uncertain. The religious cognition has indeed rarely been of an agent steadily beneficent to the community (as Mr. Mercier makes the object of Piety to be), but rather of one whom it was important to keep so as much as possible. But that the feeling is of a social nature is shown by its being reached apparently only at a certain stage of social growth, by its rites, by its contagiousness, by early gods being often (if not always) ancestors or kings, by the differentiation of social sections to maintain public worship, and by its being in general a supplement of law: though in its later growths it may aid in reforming law, as in our Puritan rebellion, when 'men of religion' beat the 'men of honour'; which, I think, by a sense of the unknown they would hardly have accomplished. Such reflections suggest that the view of Martyrdom (p. 12), as a sense that public reprobation is undeserved, must be inadequate: has it not rather been hitherto a sense of 'the perfect witness of all-judging Jove'? As to the connexion of Religion with Art, which Mr. Mercier points to in justification of his classing, that is only to a small extent directly psychological, chiefly historical; priest-hoods having alone had in early times the culture, wealth and leisure requisite for elaborate Art.

Striking omissions from this scheme are perhaps not numerous. I note chiefly Sociality, the feeling that grows from the mere presence of the community, and which is most noticeable in the effect of the absence of its conditions, producing homesickness, distress of exile, *Heimweh*. Sympathy, too, or rather the sympathetic transfiguration of other feelings is wanting :— the name Sympathy at p. 15, Table xiv., should surely be Compassion. *Weltschmerz* deserves recognition now-a-days. So I think do Malice and Malevolence in Table xiv. of the Sympathetic Feelings. Loyalty, too, and the peculiar class-feeling of Honour or 'the point of Honour', should appear in the social group. Perhaps the great generality, speciality or indirectness of some of these led to their being overlooked.

I now come to objections which seem to me to lie against Mr. Mercier's classification because of the principle on which it is based. We saw that that principle fails to take account of the remoteness, speciality, generality and complexity of some of the interactions between the organism and the environment. Mr. Spencer has shown at great length how a cognitive correspondence of the organism to the environment develops; and, though I cannot point out any explicit statement of his that alongside of the cognitive an emotional correspondence grows up, I believe every one will admit that this is a part of his doctrine; and that the two parallel growths proceed upon similar principles, namely, by the integration of simpler cognitions on the one hand, and of simpler feelings and groups of feelings on the other, into more special, general, complex cognitions and emotions. It follows from this (as Mr. Spencer shows) that neither Emotions nor Cognitions¹ can, except in the crudest way, be classified at all, because they cannot be separated.

¹ This seems a good place to notice Mr. Mercier's earlier classification of Cognitions in *MIND XXX.*, p. 260-7. He there criticises Mr. Spencer's classification of Cognitions according to representativeness, much as we have seen him above take exception to Mr. Spencer's classification of Emotions; but with less force, and in a style less safe from the charge of being merely verbal. Mr. Mercier regards the fundamental distinction of cognitions as lying between those that establish a new relation in consciousness, and those that merely revive a former one: degree of representativeness he admits as a principle for subdividing these main classes. But he seems to admit also that in every cognition there is some element of novelty; which requires the establishment of a new relation in consciousness: and plainly the seriality of consciousness makes it impossible to have twice an identical experience. Now cognition is the classification of experiences; which will vary from the most particular recognition to the most abstract subsumption; will vary too in the complexity of the terms and relations classified: and of these variations representativeness seems the best mark. I may add that as Cognitions, like Emotions, develop by integration and by differentiation from common bases, they too can be only very imperfectly classified; and although a tabular scheme of their mutual relations, analogous to that which I have in view for Emotions, may be suggested, it will perhaps be still more difficult to realise.

If it is true that the simpler emotions enter into the more complex, and are elements of them; if the activity of the more complex consists in the simultaneous activity of simpler ones; if (physiologically considered) it is probable that complex emotions do not depend on special cerebral tracts, but chiefly on centres of the co-ordination of those tracts that simpler feelings depend on,—it follows that complex emotions cannot be classed apart from the simpler. And if one simpler emotion enters into several complex ones, the complex cannot be classified apart from one another. As we cannot classify animals and the entrails of animals, so we cannot classify the feelings of Proprietary Justice and of Property, nor Love and Admiration; nor Awe and Fear. And if the feeling of Property enters into both Justice and personal Love, we cannot separate and classify Love and Justice: it is not as if Property were a generic attribute in which Love and Justice resembled each other; the common element is not a mere resemblance; it is a true identity—one root common to two trees that have other roots distinct. Yet all over Mr. Mercier's tables these feelings are widely distributed. And this is an inevitable result of the imperfect principle on which he proceeds, in regarding feelings as corresponding to single interactions of organism and environment, and overlooking the correspondence of the higher feelings with groups of interactions. If feelings have equal simplicity of excitation, why have they not equal simplicity of constitution? And surely that is not the case. If, on the other hand, some feelings correspond to groups of interactions between organism and environment, and therefore have a complex excitation, their constitution may be equally complex. And what more natural, what better economy, than that their constitution should be the union of simpler feelings severally corresponding to those interactions that together make up the groups of interactions to which they (the complex feelings) correspond? The having no regard to such considerations as these seems to me the fundamental weakness of Mr. Mercier's scheme, and one that must greatly lessen its value to Psychology; though it may have seemed a brilliant, I may say, dazzling performance to many readers—as to me certainly for a time it did, in spite of an indefinite suspicion that its acceptance implied the 'labefaction' of all the principles of the science. It would indeed be too much to declare such a classification useless: every catalogue made upon a principle not only aids the memory and facilitates a survey of the subject, but is pretty sure in some way to disclose important relationships, and so to be light-giving and suggestive. But to put it forward as carrying out the doctrine of Evolution was particularly unfortunate; for every such classification must follow the lines of origin, growth and pedigree, and precisely these the scheme before us tends to conceal and obliterate. It cannot therefore, I think, become incorporated with Psychology.

For the same reason such a system can give little assistance to Sociology as not readily lending itself to the explanation of different types of national, or of savage, barbarous and civilised character. Hence it can throw little light upon the practical sciences of human life that depend upon these more theoretic sciences of human nature : I mean, it cannot much help us in Politics, Ethics, Education, *Æsthetic*. Yet in these departments just views of the nature and relationships of our emotions are perhaps more important than of any other portions of our mental frame. Man, according to the paradox, is not a rational animal ; he is at least as much an emotional one. The arousing of emotion is to life at large what tact is to social intercourse, an instinctive guidance by clues too subtle and manifold for reason to follow or comprehend ; it is character, confidence, virtue, happiness, the support and the reward of exertion, the cement of families and states.

There is a well-known doctrine of Mr. Spencer's in relation to Ethics, that the gradual growth and organisation of the feelings, by coordinating the springs of our various activities, at last establishes the moral control of action. The power of an emotion over action is, he says, great in proportion (1) to the number of elementary experiences from which it is derived, or to its representativeness ; and (2) to the degree of its integration, or the ease and certainty with which the whole emotion, if at all excited, comes into operation. The most representative feelings are the higher moral feelings ; which, therefore, if sufficiently integrated, would overpower every other and guide the whole career of life. If it were possible then to classify feelings according to their closest resemblances and alliances, the moral feelings would be exhibited in their relations to all beside, and a great deal of light would be cast upon Ethics. The same classification might subserve the theory of Education by exhibiting the scope and organisation of our emotional nature at several stages of life. And if it were possible to indicate by it the political character, some light would be thrown upon Politics. At least, by help of a judicious commentary, it might illustrate the variations of political character among primitive tribes, among despotic or among free nations, and even among the several parties of the same nation. And we might learn perhaps that to understand the nature and growth of emotion is to have a well-grounded hope for the future of mankind. For the growth of civilised character is that kingdom whose coming is without observation, and by a stealthy prevalence transforms and ameliorates the world.

ON THE ANALYSIS OF COMPARISON.

By F. H. BRADLEY.

The interesting paper on "Comparison," which Mr. Sully has published in *MIND* XL., suggests some fruitful lines of inquiry. And there is one point, and that one of capital importance, on which I should be glad to add a few remarks, fragmentary and, no doubt, in other ways defective. This point is the *analysis* of the comparing function.

Mr. Sully has of course not omitted this question. He has pointed out certain features in the act of Comparison; but I do not find what can be called an attempt to resolve the product into its elements. I will, however, not criticise where it is probable that I do not understand, but will pass to Mr. Sully's description of the act.

"The term Comparison may be roughly defined as that act of the mind by which it concentrates attention on two mental contents in such a way as to ascertain their relation of similarity or dissimilarity" (p. 490). "Comparison is a mode of intellectual activity involving voluntary attention" (p. 498). "But it is an act of attention of a very special kind" (p. 492). In this description there are two points which call for remark. In the first place I should doubt if *voluntary* attention is essential to comparison. This is a matter of observation, or perhaps only of wording; but the second point is one connected with principle. Comparison is called "an act of attention of a very special kind," and this at once suggests a difficulty. If the special essences of the various intellectual functions are to be referred to differences in the kind of attention, then these kinds of attention should be described and enumerated, and, if possible, developed from the simple form. But if the differences in attention come rather from the different objects we attend to, then the speciality of the various intellectual functions must be looked for in themselves, and cannot come from varieties in attention. But I should confess that on the subject of voluntary attention, and of the position it holds in mental development, I am unable to understand Mr. Sully's teaching.

I will now offer the remarks which I have to make on the analysis of Comparison. We may say that the mind acts on two data in such a way as to ascertain their similarity or dissimilarity. Well now, what is this way? The mind passes of course from one object to the other, but then *how* does it pass and *what* crosses in the passage? If we use technical terms, we may answer as follows. Comparison is the (unreflective) subsumption of one datum under the other reciprocally, or the apperception of each by the other in turn. Having data A and B, we pass from A to B with A in our minds as our leading idea, and then return to A

with B in our minds as the idea which predominates. The result is that the diversities are brought into collision and so into notice, and that the identities are both reinforced by blending and also set free by the struggle of their competing differences. The process is either general or special. We may use, that is, the whole content of A or B, or but one special feature or aspect of each.

Now what operates in the above is the suggested idea of the identity in diversity, or diversity in identity, of A and B. This idea it is which (by redintegration) causes the process which brings about its own reality. If the comparison is intentional, the idea will have been there and have led from the first. But it may arise accidentally. Having A and B before me and casually passing from one to the other, I may perceive an identity or difference. This may interest and, becoming a dominant idea, may set up the process of alternate subsumption.

Thus in Comparison proper we have two data A and B, we have an idea of their identity and diversity which interests, and an ensuing process of alternate subsumption. We may have in addition an idea of this process. But before Comparison proper is developed the process cannot be set up by the idea of its result. We have then simply an identity felt in our data, which seeks in vain (by redintegration) to particularise itself in one as it does in the other, and so causes a collision.

It will, I hope, tend to clear up this rapid sketch if I try to show how Comparison is developed. Let us suppose that a child, or some other animal, has eaten a number of lumps of sugar. The result will be that, when a hard white lump is presented to its sense, that lump will be qualified by the idea of sweetness. But the lump now presented is a piece of salt, and what follows is a shock of discrepancy and pain. The question is whether this shock will subside and pass away, or be retained and lead to an advance. Let us suppose that it is retained. The suggested idea of sweetness is so strong that again and again the whiteness of the salt leads to attempt and disgust. But in this way a new connexion of whiteness and saltiness will be formed in the mind.

Let the salt still remain, and let us offer beside it new pieces of sugar (while constantly changing the local positions), and let appetite be urgent. What will happen now may be a passage to the sugar with a certain idea of saltiness, and to the salt with a certain idea of sweetness, and in each case a failure. The identical white leads to both, and the last presentation to sense in each case fills up the idea, and the result is perplexity. I think the issue may be as follows.

We are to suppose that in the sugar is a glittering appearance which is absent from the salt. These differences may not have been perceived, or at least noticed, and may have so far remained inoperative. But as attention grows through desire and pain, let this attribute become more prominent, and let it pass into the

idea with which the animal goes from the sugar to the salt. On this a fresh collision will take place. And another discrepancy will be felt when the idea of the dull salt collides with the sensation of glittering sweetness. The two pieces now, while held together by their identical attributes, are forced apart by their differences, and in this passage between them the diversities become explicit.

This I believe to be the way in which Comparison is developed. Its result, the perception of mixed identity and diversity, becomes, as an idea, the means for setting up the process which has yielded it. The chance result of groping is what gives the source of voluntary movement.

There are doubtless objections which will be taken to this fragmentary outline, but of these most will, I think, be founded on errors. I have dealt with some of them in my *Principles of Logic*, but there is one I may point out here. It will perhaps be said that my explanation is circular, since classification and comparison exist from the first and are implied in the earliest form of recognition. But the facts, as I find them both in general and in particular, are irreconcilable with this view—a view which, I believe, rests much less on observation than on preconceived ideas. And if an objector replies, But the comparison is yet 'latent,' it is 'virtual,' it is 'nascent,' it is only 'potential'—that moves me not at all. I must be allowed to say openly that such ambiguous phrases have, until they are explained, no right to exist in a scientific psychology, and that, if they were explained, their attraction would vanish. I have found that an assertion of 'potential' existence often stands for a 'nascent' perception of error; and in that sense it is welcome.

But I trust to meet with the general approval of psychologists when I say that in analysis there is still much to be done.

NOTES ON ARISTOTLE'S PSYCHOLOGY IN RELATION TO
MODERN THOUGHT.¹

By J. M. RIGG.

THE common division of history into ancient and modern is for some purposes misleading. The Greeks in the fourth century B.C. were in many respects moderns. They had their mediæval period, their era of faith and chivalry in the so-called heroic age, of which the memory is preserved in the Homeric poems but which had passed away when in the seventh century B.C. these poems were reduced to writing, and already in the fifth century B.C. their modes of thinking were nearer to that which we call the modern spirit than those of any modern nation before the fifteenth century of the present era. Since that epoch indeed the modern peoples, profiting by the heritage which the Greeks left them, have made rapid and unprecedented progress especially in physical science; but even in physical science this progress would have been impossible but for the records of the speculations of the Greeks discovered during the Renaissance, speculations by which they laid the basis of every science, except chemistry and its dependents, which now occupies the attention of mankind.

I am not however one of those who wish to minimise the originality of the modern mind, and I fully admit that even in pure philosophy its originality has been conspicuously exhibited. Yet I cannot but consider that the systems most popular in this country at the present day would have been rightly regarded by Aristotle as anachronisms. The problem of pure psychology has indeed nothing in common with the problems of physical science, and the method which yields such magnificent results in the latter has no applicability to the former.

The problem of inductive science is, in Baconian phrase, to determine not only the form of a phenomenon but the latent process which results in the form (*latens processus ad formam*), in other words, to determine the law of the genesis of phenomena; and to that end it employs observation, experiment to guide and supplement observation, generalisation to universalise the results of observation, and experiment to test the validity of the conclusions reached by generalisation. Now, in order that the applicability of this method to the philosophy of consciousness should be made out, one or other of two points must be established: either (1) that consciousness had a genesis, or (2) that the assumption that it had one is a reasonable assumption. Inasmuch, however, as the genesis of consciousness can neither be

¹ The substance of this paper was read before the Philosophical Society on 23rd April, 1885.

observed nor remembered, it is clear that it can only be assumed. Is then the assumption warrantable? It will be found, I think, by any candid and competent thinker who seriously applies his mind to the question, that the hypothesis of a genesis of consciousness involves a contradiction, and that no proposition is more certainly true than that consciousness is eternal—eternal in the only possible sense of that much abused term as being unconditioned in time.

The method of dealing with time traditional with the English school consists in representing it as an abstraction from repeated experiences of succession. The truth, however, is that consciousness of succession presupposes consciousness of time. Thus, suppose that I am sensible of a given musical note, say the fifth, and after the last vibrations of that note have died away I hear the octave struck. What does such a consciousness involve? It is clear that, if I merely retained in memory an idea of the fifth, *i.e.*, the same sensation in faint form, the two sensations would merely be present to consciousness simultaneously, the one in a faint, the other in a lively form; the relation of former and latter would not subsist between them. In order that they should be thus related, in order that I should be conscious of the sequence of the octave upon the fifth, I must on hearing the octave struck be aware that I have already heard the fifth. Being, then, in the habit of characterising certain of our present experiences as signs of past experiences, we instinctively regard the relation of sequence which we thus constitute as somehow inherent in the experiences as things in themselves, *i.e.*, we forget that sequence and consciousness of sequence are identical. This is an illusion precisely similar to that whereby the untutored consciousness regards objects as existing in unperceived space; but, because the idea of time is the form of our inner no less than of our outer sense, a profounder reflection is necessary to dispel the illusion. Once, however, it has been clearly apprehended that sequence has no being except for an intelligence which has cognition of former and latter, and former and latter no existence but for consciousness, it becomes apparent that it is as absurd to ask whether that intelligence had a genesis as whether it is extended.

Further, the assumption that consciousness had a genesis involves the assumption that time is absolute, *i.e.*, that it is a reality in which the genesis of consciousness takes place but which is itself independent of consciousness. But this assumption is denied by empiricism almost as soon as made; since time, if it is an abstraction from experience, must be relative to consciousness; and that time should be at once a reality independent of consciousness and a result of the operation of consciousness is a proposition the terms of which are repugnant. If time, whether as an *a priori* form of experience or as an abstraction from experience, is relative to consciousness, then assuredly consciousness is

eternal, and the supposition that consciousness can be accounted for as a process in time absurd. Thus empiricism destroys itself by disproving its own postulate.

This fact of the eternity of consciousness is only now dawning as it were upon the English mind, but it was as clear as noon-day to Aristotle. Thus, in a remarkable passage in the *Physica* after defining time as ἀριθμὸν κινήσεως κατὰ τὸ πρότερον καὶ ὕστερον, he observes that it follows that time has no existence apart from consciousness.¹

In conformity with this doctrine we find Aristotle (*De An.*, iii. 5), speaking of reason as formative or constructive (νοῦς ποιητικός) inasmuch as it is only for it that any object exists, and as eternal (καὶ τοῦτο μόνον ἀθάνατον καὶ αἰδίδιον). It has been suggested that this passage² has undergone revision by an Alexandrian hand, but with little reason, since not only is it confirmed by many incidental expressions scattered throughout his system, of which that in the treatise, *De Generatione Animalium*, ii. 3 (λείπεται τὸν νοῦν μόνον θύραθεν ἐπεισιέναι καὶ θεῖον εἶναι μόνον) is perhaps the most remarkable, but it is complementary to the theory of nature expounded in the seventh and ninth chapters of the eleventh book of the *Metaphysica*, and though not explicitly enunciated till so late in the work really dominates the *De Anima* throughout. Thus in the first chapter he mentions as one among the many possible questions there briefly referred to—whether the soul has not some faculty which is pure in the sense of neither originating in sense nor being conditioned thereby; which if it exists would be the reason.³ In this passage the words λαβεῖν μὲν ἀναγκαῖον οὐ ῥᾶδιον ἐε are particularly noticeable as implying at once a preconceived theory and a sense of the special objection which has to be met—an objection to which he recurs in the seventh and eighth chapters of the third book but which he can hardly be said to remove.

So in his criticism of the physical theory by which Plato sought to explain the initiation of motion by consciousness, he points out that it assumes that the soul is extended, and this, he says, it clearly cannot be, since the universal soul must be such as that which is called νοῦς, and this, though it is continuous and one, is not a continuous quantity—is not extended.⁴

The same conception of reason as a formative or constitutive faculty appears in his criticism of the harmonic theory of the soul. Harmony is, he says, either a proportion or an adjustment, and the soul cannot be either the one or the other.⁵ Why the

¹ ἄξιον δ' . . . ἀριθμητά ἐστιν (*Physica*, Δ 13).

² See Torstrik's edition.

³ ἀπορίαν δ' ἔχει . . . ἄνευ σώματος εἶναι (*De An.*, i. 1).

⁴ πρῶτον μὲν οὖν . . . ἀλλ' οὐχ ὡς τὸ μέγεθος (*De An.*, i. 3).

⁵ καίτοι γε ἡ μὲν ἁρμονία λόγος τίς ἐστι τῶν μιχθέντων ἢ σύνθεσις, τὴν δὲ ψυχὴν οὐδέτερον οἶον τ' εἶναι τούτων (*De An.*, i. 4).

soul cannot be either a proportion or an adjustment he does not say, but unquestionably the enthymeme latent in the argument is that proportion and adjustment presuppose the existence of a rational and synthetic principle, presuppose the formative *νοῦς*.

The modern analogue of the harmonic theory is the attempt made by biologists to identify the soul with a special form of that correspondence between organism and environment in which life is held to consist. Life according to Mr. Spencer is "the continuous adjustment of internal relations to external relations," and intelligence he regards as the resultant of a higher degree of generality, speciality and complexity in the adjustment or correspondence.¹ It is obvious that the criticism to which Aristotle would have subjected this theory would have consisted in pointing out that adjustment or correspondence implies a synthetic principle, a formative reason (*νοῦς*).

From the harmonic theory, Aristotle passes by a natural transition to the consideration of that which he calls the absurddest theory of all,² to wit that the soul is a self-moving number, a theory attributed to Xenocrates, a pupil of Plato, but which like the harmonic theory is not without its analogue in modern thought, especially in Leibniz. The theory of Xenocrates appears to have been based upon atomism, to have been in fact atomism as interpreted by a Pythagoreanising Platonist. Thus he seems to have identified the Platonic ideas with numbers, and the Democritean atoms with the units of which the latter were composed, and to have regarded the soul as a certain *εἶδος* or number. The soul, however, being active must be defined not merely as a number but as a self-moving number. That this is a substantially accurate account of the genesis of the doctrine of Xenocrates, a study of the fragments and scholia collected by Mullach will, I think, make fairly clear. While however we may not unreasonably conjecture that it was the object of Xenocrates to harmonise that form of the Platonic idealism which had most affinity with Pythagoreanism with the atomic theory of Democritus,³ we know by his own avowal that Leibniz aimed at reconciling Plato with Democritus, and both with Aristotle and the Schoolmen and Descartes.⁴ To this end it was essential that the atoms should surrender their corporeal character, that they should become genuine indiscerptibles, or, as he calls them, real, *i.e.*, purely formal unities. Even the mathematical point was not sufficiently abstract for his purpose,

¹ *Principles of Psychology*, § 176.

² πολλὸν δὲ τῶν εἰρημένων ἀλογώτατον τὸ λέγειν ἀριθμὸν εἶναι τὴν ψυχὴν κοινὸν θ' αὐτῶν (*De An.*, i. 4).

³ That this was Aristotle's view seems probable from his statement, δόξειε δ' ἂν οὐδὲν διαφέρειν μονάδας λέγειν ἢ σωματία μικρά κ. τ. λ. (*De An.*, i. 4).

⁴ *Opera*, ed. Erdmann, pp. 205, 446.

since it can only be defined as the termination of a line. Hence by a somewhat unhappy metaphor the monads are designated metaphysical points, pure, *i.e.*, perfectly abstract units. The monad however is not merely one and indivisible; it is also active and percipient. Of perception no distinct account is given. It is not a passive affection of the monad, for that is inaccessible to any influence except that of the uncreated monad, God: its nature is wholly active. Accordingly perception is vaguely described as "the transitory state in which a multitude is embraced and represented in unity or in the simple substance," as "a reflection of the universe" due solely to the spontaneous activity of the monad and varying in adequacy according to the degree of that activity. God is not invoked to explain the origin of perception, but He is represented as exalting and depressing the activity now of this now of the other monad, so as to give an appearance of action and reaction between them.¹ An attempt is made to explain the transition from one perception to another by a vague reference to an internal principle of "appetition," a kind of final causality. The net result is a jumble of incompatible ideas, a unit which is wholly secluded in its abstract unity yet reflects a manifold universe, and does so in virtue of its own activity, modified by the activity of the *μονὰς μονάδων*. Leibniz indeed evaded the absurdity (on which Aristotle insists as against Xenocrates) inherent in supposing a unit to move or be moved, by his hypothesis of a preestablished harmony between the "appetites" of the monad and the system of efficient causes, so that every perception of the monad has its correlative physical movement;² but it is as absurd to predicate activity of a unit as to predicate motion of it, and just because the soul is active it cannot be a unit. Number, as Aristotle points out at a later stage, is one of the common perceptions, and therefore no idea derived from number, however subtly disguised its derivation may be, can do duty as a definition of the perceptive faculty.³

Another form of the arithmetical theory of the soul no less absurd than that of Leibniz is that which identifies it with the series of its states. A series of course is a number, and to define the soul as a series of feelings aware of itself as a series is in fact to define it as a self-conscious number. The number, the series of states, exists only for the soul in its reflection upon itself; so that the definition is a *ῥησιςρον πρότερον*.

Aristotle concludes his review of his predecessors by examining the theory of perception advanced by Empedocles. This theory, based on the principle in itself true that like is only perceivable by like, is nevertheless so crude that it is chiefly interesting because of the light which Aristotle's method of refuting it sheds

¹ *Opera*, ed. Erdmann, pp. 705-6, 709, 745.

² *Ibid.*, p. 714.

³ *De An.*, ii. 6.

upon his own theory. Empedocles held that perception is rendered possible by the presence in the soul of the same elements as are found in nature, to which Aristotle replies in effect that the mere presence of the elements in the soul would be useless in the absence of a synthetic principle, otherwise the elements might indeed be perceived in their severalty, but no concrete object could be perceived at all, and this synthetic principle can be no other than reason.¹

Here it should be observed that, crude as was the theory of Empedocles, it at any rate evinced a juster appreciation of the nature of the problem to be solved than either that of Locke or that of Mr. Herbert Spencer. Locke reflecting on the mind in its supposed pristine state of vacuity inquires how came it by its manifold content, and answers "in one word from experience". "Our observation," he says, "employed either about external sensible objects or about the internal operations of our minds perceived and reflected on by ourselves is that which supplies our understandings with all the materials of thinking".² In other words, he assumes that the mind can and does bridge the gulf which separates it from "external objects"; he assumes that these objects are "sensible," that they somehow affect the mind. The assumption however conceals a very real difficulty and one which, though ignored by Locke, was present to the mind of Empedocles. That a material object being homogeneous with the physical organism may induce certain changes therein which ultimately issue in certain excitements of the sensorium is intelligible, but there the intelligibility stops. That the said nerve-changes should become sensations is in no way intelligible, since there is no community between a nerve-change and a sensation. The transmutation of a nerve-change into a sensation would be an uncaused event, and the assumption of an uncaused event might seem to be a bad beginning for philosophy. Yet this is just what Locke assumes.³ Mr. Spencer attempts to evade the difficulty by describing feeling and nerve-change as two manifestations of the same reality, that reality being assumed to be totally *distinct* in nature from either of its manifestations. This theory will not bear the slightest inspection. In place of explaining the facts it formulates them in such a manner as to preclude explanation. That the "ultimate reality" manifests itself in two phenomena totally unlike itself is a contradiction in terms. To manifest is to make known: that the unknowable makes itself known is a contradiction in terms, but when it is added that its phenomena are totally unlike itself the original statement is

¹ ἐξ ὧν μὲν οὖν . . . τῶν ὄντων εἶναι (*De An.*, i. 5).

² *Essay concerning Human Understanding*, ii. 1, § 2.

³ It is but fair to Locke to observe that the difficulty becomes very real to him at a later stage (iv. 3, § 28).

retracted, and the unknowable restored to its full privilege of unknowability.

But to return to Aristotle: he resumes the criticism of Empedocles in the fifth chapter of the second book, contenting himself however with pointing out the essential distinction between the passive reception of an affection and the active response of a faculty to stimulus. In the brief chapter which follows, he anticipates Locke's distinction between the primary and secondary qualities of matter by his division of perceptions into particular and common; with this difference, however, that—unlike Locke with his primary qualities (solidity, extension, figure, motion or rest, and number)—he does not regard the common perceptions, motion, rest, number (in which, as we have seen, he includes time), figure and magnitude, as being any less relative to consciousness than the particular perceptions.

The seventh and following chapters including the eleventh are devoted to discussing the physical conditions of the special perceptions and, though ingenious and interesting in themselves, are of no importance for our present purpose. At the close, however, of the eleventh chapter, Aristotle is brought back to the psychological point of view by consideration of the fact that extreme intensity of sensation interferes with clearness of perception; showing, he says, that perception is a judgment, which implies the equal presence to several sensations of a μέτρον, a principle at once unifying and distinguishing that judges between them. This idea is farther developed in the twelfth chapter.

In the second chapter of the third book he raises the question how it is that we are able to compare the special perceptions so as to recognise their unity as perceptions. In themselves, he seems to argue, colour and taste are neither similar nor different. How then are they comparable and distinguishable? The answer of course is that consciousness implies a principle of unity through the common relation of which to the special perceptions the latter are at once united and distinguished.¹ In the seventh chapter this unifying principle is explicitly identified with the νόσ.

As I understand Aristotle, then, he conceived the reason to be operative in constituting the objects of perception as well as in theorising, to be eternal and homogeneous with the principle revealed to it in nature. On this latter point there is indeed no doubt. At the end of the third chapter of the first book of the *Metaphysica* he makes it perfectly clear that reason is with him the reality of nature, and the same doctrine is more formally and precisely stated in the seventh and ninth chapters of the eleventh book of that treatise. It follows that a definition of the soul *per genus et differentiam* is not to be looked for from him. As he says, "the soul is in a manner all things; for things are either perceivable or intelligible, and the intelligible world exists

¹ ἐπεὶ δὲ . . . δῆλα εἶναι (*De An.*, iii. 2).

only in being understood and the perceived world in being perceived".¹ Soul in short is the infinite and eternal of which things in space and events in time are but so many modes, and nature as known by us is the point of contact (as it were) of the universal with the individual soul.

This point of view is to my thinking so far from being out of date that it is the only possible metaphysical basis of the Evolution-hypothesis. That hypothesis, postulating as it necessarily does an eternal universe, is incompatible with the doctrine of relativity as commonly understood by English thinkers, yet that doctrine if limited to the assertion that existence means nothing more nor less than cognition is irrefragable. When Mr. Spencer says, "Should the idealist be right the doctrine of Evolution is a dream," I agree with him, understanding him to mean by the idealist a person who maintains that nothing exists but the individual consciousness; but I rejoin, should Mr. Spencer be right the doctrine of Evolution is equally a dream. The plausibility of Mr. Spencer's theory is entirely due to the assumption of the objective existence of space and time and of organism and environment. In the *Psychology* however he is compelled to give some account of the evolution of space and time as forms of consciousness. For this purpose he retains the assumption of their objective existence, the gist of his theory being that they are forms of the *Non-ego*, by which he means the absolute reality, which by somehow operating continuously upon successive generations of conscious subjects have established congenital modifications of mental constitution corresponding to them. Eventually, however, he discovers that space and time as in themselves are not "in the least like" space and time as we know them, and that the whole form and content of consciousness including the very organism and environment, through the interaction of which according to the earlier version of the theory consciousness is supposed to evolve, are products—not indeed of Evolution, for that as an intelligible process and so relative to consciousness presupposes the existence of consciousness, but—of some mysterious operation of the Unknowable Power of which nothing can be said but that it has "no kinship of nature with evolution".²

The theory of Evolution in the final form which Mr. Spencer gives it is indeed a dream; it only becomes intelligible when with Aristotle and Hegel we regard the Power which it postulates as the immanent reason of the universe.

¹ Νῦν δὲ περὶ ψυχῆς . . . ἡ δ' αἴσθησις τὰ αἰσθητά (*De An.*, iii. 8). The qualifying *πως* indicates no uncertainty in Aristotle's thought, but is intended to negative the doctrine of pure relativity held by Empedocles and others. See iii. 2: ἀλλ' οἱ πρότεροι φυσιολόγοι κ. τ. λ.

² *Principles of Psychology*, §§ 473-4.

VII.—CRITICAL NOTICES.

Knowledge and Reality: A Criticism of Mr. F. H. Bradley's Principles of Logic. By BERNARD BOSANQUET, M.A., late Fellow and Tutor of University College, Oxford. London: Kegan Paul, Trench & Co. Pp. xi. 333.

In the Preface to this book, Mr. Bosanquet speaks of the *Principles of Logic* as "a work which deserves to be epoch-making in English philosophy". Nor can this high claim be well denied, if the attempt to bring to bear upon a science a radically new conception of its nature, and to re-adjust its content in the light of this, is entitled to the name of "epoch-making". For Mr. Bradley's treatment of Logic amounts to no less than this. His work may fairly be described as an attempted reconstruction of logical doctrine in view of the achievements of Idealism. Very little of the old traditional Logic can stand the searching blaze of that fierce light; but, according to Mr. Bosanquet, the work of reconstruction is not radical enough. There are still parts of the old fabric left standing, though their foundation is undermined; and the object of this "Criticism" is to complete Mr. Bradley's work both in its negative and in its positive aspects, in the destruction of the old and in the substitution of a more adequate view. It is a certain "deficiency in philosophical thoroughness" which, according to Mr. Bosanquet, Mr. Bradley shares with "the writers of the German reaction," and which he would remedy by exhibiting the necessary consequences of Mr. Bradley's principles. "It is my object," he says, "in the following pages to show how Mr. Bradley's essential and original conceptions might be disengaged from some peculiarities which he apparently shares with reactionary Logic." In the main, then, the critic agrees with his author; and his object throughout is evidently not only to point out defects in the *Principles of Logic*, but quite as much to emphasise and carry home the greatness of the advance made in that work upon the standpoint of traditional logic. At times, indeed, Mr. Bosanquet's criticism may seem a little fine, especially in the discussion of details whose essential connexion with the main standpoint of his book it is occasionally difficult to see. Perhaps, however, this is a hardly avoidable accompaniment of that "thoroughness" in following out the consequences of a point of view which he desiderates as the one thing wanting in Mr. Bradley's work, and which is certainly the characteristic of his own. It must be added that the difficulty of the *Principles of Logic* is rather increased than otherwise in this exposition and criticism; and one feels occasionally that the difficulty is not altogether inherent in the subject, but is the result of a certain want of perspective in the treatment, which

makes it not always easy to lay hold at once on the essential and subordinate to it what is really matter of detail. This initial difficulty once surmounted, however, and the meaning and connexion of the various parts once apprehended, the discussion is invariably found to be original, careful and coherent.

The chief part of Mr. Bradley's work and of Mr. Bosanquet's criticism is the doctrine of Judgment. The traditional view itself recognises this as the citadel of the situation; if reconstruction is necessary here, it is necessary throughout. Now Judgment, according to Mr. Bradley, is not—as traditionally conceived—the connexion of two ideas, whether in extensive or intensive quantity; but the reference of an idea (predicate) to Reality (the constant subject). This reference to Reality is of the utmost importance in Mr. Bradley's work, and it is the feature in it against which Mr. Bosanquet's criticism is chiefly directed. 'The *ultimate* subject in judgment' is always the Real, which is found in perception, while it is 'for us an ideal construction'. It is in this view of Reality that Mr. Bosanquet detects the saddest want of "thoroughness". "You cannot at once treat reality as ideal construction, and demand from it characteristics approaching to those of presence in the sensible series." Such an "anti-monistic attitude" or "*bias*," he maintains, is unworthy of Mr. Bradley. "Only a rich man may wear a bad coat, and only a philosopher of Mr. Bradley's force could escape suspicions of a crude dualistic realism when he writes as follows:—'It may come from a failure in my metaphysics, or from a weakness of the flesh that continues to blind me; but the notion that existence could be the same as understanding strikes as cold and ghost-like as the dreariest materialism. That the glory of the world in the end is appearance, leaves the world more glorious, if we feel it is a show of some fuller splendour; but the sensuous curtain is a deception and a cheat if it hides some colourless movement of atoms, some spectral woof of impalpable abstractions, or unearthly ballet of bloodless categories. Though dragged to such conclusions, we cannot embrace them. Our principles may be true, but they are not reality'" (p. 18). Mr. Bosanquet protests against this "baleful enchantment," this "dream which . . . seems never to lose its maleficent spell". "Surely the more glorious reality," he says, "is that which our vision and our will can make of the world in which we are; and the certain frustration of all such achievement is to relax the toilsome grasp which holds real and ideal in one" (p. 20). Again: "I may observe in reference to his entire position that the distinction between reality and the discursive movement of the intellect appears to me to be for us a distinction *within the intellectual world*" (note, p. 19). Mr. Bosanquet explains that he suspects he must have misunderstood Mr. Bradley here, as he cannot suppose him actually to hold any such view as that described above. But probably this line of thought is more conscious and fundamental in Mr. Bradley than his critic supposes. Nor is

he singular in his indulgence of such an "attitude" or "bias". One may point to the words of a philosopher no less profoundly influenced by the conception of Reality as "ideal construction"—Dr. Hutchison Stirling—who, in his Annotations to Schwegler's *History of Philosophy*, says: 'Neither gods nor men are in very truth logical categories'. Such a deliberate conviction about the nature of Reality, though it may interfere with the triumphant march of an idealistic logic, is not to be simply set aside as "capricious" and deficient in "thoroughness". It is enunciated precisely on the ground that the thorough following out of the standpoint of Idealism does not yield Reality, but only its semblance, as result; and in order to its refutation, this criticism of Idealism must be refuted. This is a task which Mr. Bosanquet does not contemplate. He contents himself with proclaiming that the Real is simply the system of relations, the ideal completion of that process of Judgment which is its progressive definition. "The ideal assertion, which alone could have absolute strength, would be the predication of the whole content of the Real about itself as subject" (p. 138).

There is no difficulty, on this view of Reality, in giving a coherent account of Judgment. The subject does not now fall outside the judgment, "*except in the sense of the one ultimate subject, reality or the non-phenomenal fact*, which all judgment is an attempt to define, and this falls within the judgment, in as far as the latter is true" (p. 187). The Judgment thus becomes a self-contained unity: "each part, though distinguished, is in the other". Nor can Mr. Bosanquet yield to Mr. Bradley that the old logical subject, predicate and copula are mere "superstitions". He is particularly earnest and successful in his vindication of the copula. Even in such abbreviated judgments as 'Wolf!' or 'Fire!' which Mr. Bradley cites as irresistible evidence in favour of his view, Mr. Bosanquet finds something of the nature of a copula. It is indeed implied in every judgment as such; it is "nothing but the indication that the act of judgment is performed". "When we regard the logical copula as the common or formal element of the act which is a judgment . . . and the grammatical or linguistic copula as the expression or communication of this act, . . . then it becomes a contradiction to say with Mr. Bradley that judgment can exist without a copula" (p. 168). For the essence of Judgment is still seen to be *connexion*—though connexion of a different kind from that of the old Logic; and the copula is simply the explicit exhibition of that "systematic" character which constitutes Reality, and which the Judgment claims "to exhibit, that is, to construct or reconstruct".

It is only possible to refer in a word to Mr. Bosanquet's view of Inference. Here he is essentially at one with Mr. Bradley in his condemnation of Subsumption as an inadequate account of the actual operation. He adds, however, that "subsumption still haunts us" in two forms—(1) in "the process of interpreta-

tion," and (2) in what he calls "second-class inferences," *i.e.*, inferences which, originally made by experiment, are repeated by subsumption. He is also at pains, as in his account of Judgment, to do justice to the traditional view, and to preserve what in it was true, though in a new form. "If we are to be deprived of subsumption, as I am convinced that we must be, we should be doubly careful with our new account of Inference." In Mr. Bradley's work he does not find the same analysis of Inference as that given in the Syllogism, "or any substitute for it". This defect he seeks to remedy. The 'major premiss' must indeed be given up; but the task which it was meant to fulfil still remains. "An explicit exhibition of ground and principle is indispensable to every inference which claims to be called rational," even although "such an analysis does not change the intellectual function, but only gives it self-consciousness". For this "nexus" or "ground" is "the element which constitutes its essence as inference". "Only in as far as there is an apprehended source of necessity is there, to my mind, an inference at all; and in as far as we fail to represent this in black and white when we state our premisses, so far does the inferential character of the inference escape our analysis" (p. 322).

Had space permitted, attention might have been directed to many particular discussions of unusual excellence in this book. Such, for example, is the treatment of Immediate Inference, all supposed examples of which Mr. Bosanquet reduces to "efforts of inference," "formal or interpretative inference," which may not be "psychologically impossible," but are really "present in the definite structure" of the original judgment. Of great value also is the account of the distinction between Categorical and Hypothetical Judgments (*c. i.*), of "Proper Names" (*cp.* especially pp. 73-75), and of "Induction by simple Enumeration" (pp. 84, 85).

JAMES SETH.

The Guide of the Perplexed of Maimonides. Translated from the Original and Annotated by M. FRIEDLENDER, Ph.D. 3 vols. London: Trübner, 1885. Pp. lxxx. 368; ix. 225; xxvii. 327.

As the story goes, Maimonides was at first anxious to prevent the study of his work by any but members of his own faith, and accordingly he had only one other copy made besides that which he sent to Ibn Aknin, for whose benefit the *Guide* was composed. Though Arabic was the original language of the work, Hebrew characters were used to contribute towards this restricted circulation. Be that as it may, the author was not very much concerned to place his views before even his own brethren, and in one of his letters to Aknin he declared himself well content with his fate if he were understood by but one sympathetic mind. But his longing for obscurity was not to be satisfied. Soon, copies of his work

were made in Arabic characters, and later on an Arabian author wrote a commentary on the 26 Propositions with which Part ii. of the *Guide* opens. Maimonides communicated the instalments of his work to Aknim as they were composed in detail, and on one occasion does not quite know whether he had despatched the concluding sections of Part i. or not.

The importance of Maimonides may be gauged from the extensive mythology that has grown up round his name. There is a legend which tells how the boy Moses was a dull and idle child, so slow in learning that Maimon, his father, in despair drove him from his home. Moses took refuge overnight in the Cordova Synagogue, and lo! when he awoke in the morning he was another being—from the dullest he became the cleverest boy in the town. There is no foundation for this story, but it well typifies the estimates that have been formed of him both by his own and later generations. There is no medium—no moderation; *aut Caesar aut nihil*, either greatest or least. His immediate successors were divided by the question of his merits into violently opposed factions—excommunications being freely indulged in by Maimonists and anti-Maimonists alike. The history of Judaism for a considerable period is the history of the Maimonist controversy. Hence, quite apart from its philosophical merits, the importance of the *Guide* more than justifies the issue of the present translation.

This is not the place to enter into a full account of the author's life. Dr. Friedländer has collected in his useful Introduction all that is known of the author, and has adduced some new facts and arguments and many fresh interpretations of old materials. On one point I am not quite convinced despite Dr. Friedländer's powerful advocacy, and that is the alleged apostasy of Maimonides, who in common with several of his brethren is asserted by Arabian writers to have been forced to outwardly conform to the Mohammedan religion. This imputation—which is not at all a dishonourable one—appears well founded. Aknim, Maimonides's most intimate pupil, is declared to have taken this step by Alkifti, who could have had no object in falsely charging his friend with it. Dr. Friedländer thinks his view supported by the absence of reference to the supposed lapse of Maimonides during the controversy that ensued. But were not many of Maimonides's opponents in the same case as himself? They could not decently blame him for so venial a fault if they had committed it themselves. But the whole of Dr. Friedländer's discussion of this subject (Introd. xxxiii.-xl.) is both able and original. On only one other point of Maimonides's life will I offer a remark. Prof. Pearson, in *MIND*, Vol. viii. 340, explained Spinoza's refusal of a University professorship as due to his sympathy with the Jewish views of life expressed by Maimonides. I have found an even clearer indication of the strength of Maimonides's feeling in this direction in a letter dissuading Aknim from abandoning his trade to devote

himself entirely to teaching. He advises his friend to retain his business, while at the same time employing his leisure in the study of medicine and of the law. "One drachm," writes Maimonides, "gained by weaving, tailoring, or carpentry is to my mind more agreeable than the whole revenue of the Prince of the Captivity."

Dr. Friedländer's is not the first attempt to translate Maimonides into English. Parts of the *Strong Hand*, the *Book of Precepts*, the *Eight Chapters on Ethics*, and of the *Guide* itself have been so rendered; but these are mostly the non-philosophical portions of his extensive works. The first translations of the *Guide* were the Hebrew versions of Charizi and Ibn Tibbon, the latter of which was executed to a certain extent under the author's supervision, while the former is free and (according to the author's son) inaccurate. Later translations were Buxtorf's in Latin, and the German version of Fürstenthal and Scheyer. Both of these suffer in intelligibility, inasmuch as they are based upon Ibn Tibbon's version, which, while excessively literal, is written in a difficult and crabbed style. The cause of this may be found in the want of a true Hebrew philosophical nomenclature. The cumbrous phraseology of Hebrew philosophers is a hybrid Greek and neo-Hebrew, the interpretation of which presents difficulties even to professed students of Hebrew. Munk's French translation was the first, in any living language, which deserves the name. His superiority is due chiefly to his employment of the original Arabic text, which in fact he reconstructed and published for the first time. In his zeal, however, he went to the other extreme, and erred in frequently neglecting the guidance of the Hebrew versions where the Arabic was defective or ambiguous. Dr. Friedländer, on the other hand, systematically compares his version with both Ibn Tibbon's and Charizi's, and thus has the advantage of translating from three independent texts. Occasionally Dr. Friedländer's amendments of Munk are doubtful improvements,¹ but, speaking generally, the English version is an immense advance upon Munk's. It is clear, intelligible, and fluent, and at the same time a very faithful reproduction of the abstruse original. It is chiefly in the very difficult Part ii., especially in the Introduction, that Dr. Friedländer's superiority manifests itself; but Part iii. is marvellously well done, the English being flowing and elegant. With the aid of the notes, which enable him to contrast the rendering of Munk in most disputed passages, the reader may be quite confident that in the present edition he has before him as accurate an exposition of Maimonides as a translation can hope to afford. The introductions and notes contain a valuable mass of information which, it is to be hoped, Dr. Friedländer will soon supplement by an essay on the exact relations between Maimonides and European Philosophy.

¹ *E.g.*, i., 189, 341, though these points are very unimportant.

The unique position occupied by Maimonides is not entirely due to his philosophical superiority over other Jewish thinkers. Saadia, Ibn Gebirol, Behai, Jehudah Halevi, Ibn Ezra and Gersonides, are philosophers who at times excel Maimonides in breadth and even more frequently in subtlety. Yet only one of these is known to any but Jewish scholars, while the bulk of his own brethren as well as of cultured Europe have heard at least Maimonides's name. Maimonides would, in the first place, have been famous without writing the *Guide*. For in his great work, the *Strong Hand*, he had systematised the literature of Judaism—he had reduced to order the mass of Rabbinical history, ethics and law known as the Talmud. Maimonides was thus a Rabbi of the Rabbis, and had attained highest rank in Rabbinical composition. When, therefore, he compiled a systematic exposition of his philosophy, he spoke not so much from an individual standpoint as from the standpoint of Judaism; it was not Maimonides who discoursed, but the author of the *Strong Hand*. Hence the violence, too, of the opposition which the *Guide* aroused. Ibn Ezra, like most eminent Jewish authors, dabbled in philosophy, but did not reduce his views to system; Jehudah Halevi has the semblance of system without the reality; Saadia is systematic but within limits too narrow to truly deserve the epithet. Maimonides was much exercised by this fault which, especially as regards the legal literature of his brethren, he strongly condemned. If space permitted, I think it would be easy to account for this deficiency, if such it be. The absence of a permanent home, and acceptance of the Bible as the whole philosophy of life, may be mentioned as contributory causes. It must not, however, be thought that the *Guide* can be unreservedly described as systematic: it is *that*, but only relatively to the author's objects. He clearly states his aims—to examine into the metaphysical meaning of Scripture, to criticise the *Kalam*, to prove the doctrine of Creation, and to investigate the relations between God and the Universe; and he fairly succeeds in carrying them out. "In this work," he says, when half way through his task, "it is not my intention to copy the books of the philosophers, or to explain difficult problems, but only to mention those propositions which are closely connected with our subject."¹ Throughout, he adheres to his expressed intention² of addressing himself only to readers in whom might be presupposed a certain acquaintance with theology and philosophy, but who might find themselves unable to reconcile their conflicting doctrines. A strange though not altogether unparalleled fact may be here noted, *viz.*, that from the very part of the *Guide* which goes beyond the original design—the "Appendix," as Dr. Friedländer aptly terms it—the author's work is best known.

Joseph Ibn Aknin had been at one time a personal pupil of the

¹ ii. 9.

² Cp. i. 6, 117 ff.

author, who formed a high opinion of the character and talents of his disciple. After a course of astronomy, mathematics and logic, he taught Joseph the elements of metaphysics, but found that his pupil was not to be put off with vague hints in reference to the esoteric doctrines of philosophy. Maimonides was opposed to teaching philosophy indiscriminately, but he deprecated the study of metaphysics not so much because he considered the objects of philosophy impious or unattainable, as that (to use his own simile) he believed transcendental food too heavy for the digestion of an uncultured intellect. With Aknim he could not plead this excuse, even had he been so inclined. Aknim, Maimonides thought, had undergone a systematic training which would justify the author in presenting him with a full statement of his views. For him, and others like him, Maimonides accordingly composed his treatise—the *Guide of the Perplexed*.

First, he would explain certain terms occurring in the Prophetic writings. It will be readily seen that some knowledge of Hebrew is necessary for a full appreciation of this portion of the work, but the reader must not be dissuaded from its perusal by the large quantity of Hebrew type which distinguishes the first volume of Dr. Friedländer's translation. It should be mentioned that this instalment of the translation was issued as far back as 1881 under the auspices of the Hebrew Literature Society (now defunct), and was therefore intended mainly for readers to some extent acquainted with Hebrew. But not only will this difficulty be found altogether absent from the latter chapters of Part i. and from almost the whole of Parts ii. and iii.,¹ but it is more apparent than real even in the earlier sections. In these, Maimonides is chiefly occupied with the Biblical anthropomorphisms, and their relation to the true theory of God. Earlier Jewish philosophers and theologians had explained these expressions as figurative, but Maimonides is not satisfied with this: he attempts to assign to each of them some definite metaphysical meaning. Besides figurative terms, he distinguishes between terms homonymous, which denote things totally distinct, and terms hybrid (which denote things which may variously be taken as belonging to the same or to different classes). Thus the narrative of Adam's sin is interpreted as an allegorical exposition of the relations between Sensation, Intellect and the Moral Faculty (i. c. 2). The Hebrew term for *form* he explains (i. c. 3) as (*a*) bodily form—shape, as perceived by the senses; (*b*) mental form—the image which remains when the objects have ceased to affect the senses; and (*c*) the intellectual form—the true *idea*, in which sense alone it can be applied to God. Prof. Pearson thought it necessary to seek outside the *Guide* for Maimonides's views on the close connexion between truth and virtue. But Maimonides affirms the same doctrine here, declaring, for instance, that "only the man

¹ No Hebrew type is used in Vols. ii. and iii.

whose character is pure, calm and steadfast can attain to intellectual perfection".¹ Leaving the examination of specific Biblical terms, Maimonides proceeds to show that ordinary men consider matter or body the only true and full existence; that which is neither itself a body nor a force resident in a body is to such men non-existent and inconceivable. Again, life is commonly identified with motion, although motion is not a part of the essence but a mere accident of life. Perception, again, is the most conspicuous means of acquiring knowledge. Especially is this true of sight and hearing; and speech is the only mode of communication between one mind and another. Hence God is figuratively described as active, seeing, hearing and speaking, and even the organs by which those functions are performed by man are ascribed to Him; for in man these functions are perfections, and they are predicated of God because we wish to assert His perfection. Action and speech are also applied to God to symbolise that a certain influence has emanated from Him.

This leads us to consider an important part of Maimonides's philosophy, *viz.*, the meaning of communication between God and men. Maimonides² agrees with the Platonic or general Greek view that prophecy or attainment of direct knowledge of the truth is a *natural* faculty of men which may be reached by all who submit to the necessary preparation, and who can raise themselves to the requisite intellectual and moral perfection. Maimonides endeavours to show that this is the view of the Bible, but he is not successful in this attempt, and most of his Jewish successors have severely attacked him on this point. He seeks to anticipate obvious objections by declaring that men duly qualified may be miraculously withheld from prophecy by the will of God; but this is merely a subterfuge to hide the fact that, according to Scripture, the will of God is the regular and normal condition for acquiring the prophetic spirit. Prophecy, according to Maimonides, is an emanation through the Active Intellect to man's rational and imaginative faculty, *i.e.*, the faculty of receiving sense-impressions, and retaining and combining images of them. The latter part of the faculty is most active in dreams, which differ from prophetic vision in degree and not in kind. The imagination acquires such an efficiency in its action that it regards the image as if it came from without, and as if it were perceived through the bodily senses. Granted that a man possess a brain and body in perfect health, that his passions are pure and well balanced, that his thoughts are engaged in lofty matters, that his attention is directed to the knowledge of God,—such a man must be a prophet. If he be of the highest order, his imagination will repre-

¹ For some very acute psychological discussions, which space will only permit me to allude to, I may refer the reader among other passages to i. c. 47, c. 72, c. 73; ii. c. 37, c. 40 (opening); iii. 41-4.

² ii. 160 till end of volume.

sent things not previously perceived by the senses, which his intellect will have been perfect enough to comprehend. Maimonides's view seems to come to this, that prophecy does not differ essentially from ordinary intellection: perception is the result of a divine influence, and prophecy is that state of intellection in which the preliminary *sense*-perception is more or less dispensed with; in a word, when the divine influence, by acting immediately on the perfect intellect, is represented by the perfect imagination, without the intermediary of the faulty and defective senses.

Attributes are, according to Maimonides, utterly inapplicable to God. This assertion he proves by classifying attributes generally, and by showing that each and every class is irrelevant when applied to God. His classification is based on the lines of Aristotle's ten Categories, but Maimonides does not slavishly follow his philosophical master.¹

Essential Attributes.	{	(1) Including <i>all</i> the essence, genus and differentia, Man is a rational animal. (Substance.)
		(2) Including only <i>part</i> of essence, Man is rational, or Man is an animal.
Non-Essential "	{	Quality. { Quality. Quantity. Passiveness.
		Relation. { Relation. Place. Time.
		Action. { Property. Position.
		Action. { Action.

In this scheme I have followed Dr. Friedländer's identification of Aristotle's categories, and, though this classification of Maimonides's is not altogether satisfactory, it appears to meet some of the modern objections to Aristotle's arrangement by distinctly combining the last nine categories as non-essential. These attributes are all inapplicable to God; we cannot even predicate His essence, we can only assert *that* He exists. No definition of God is possible *per genus et differentiam*, since these are the causes of the existence of anything so defined, and God is the final cause. Even Unity is inadmissible as an accident to God; God is One, but does not possess the attribute of Unity. To say in the usual meaning of the term that God is One, is to imply that His essence is susceptible of quantity; but, as metaphysics is forced to employ inadequate language, in order to assert that God *does not include a plurality*, we declare that He is One. Hence, since only *negative* attributes are admissible, and since these are infinite in number, there is no possibility of obtaining a knowledge of the true essence of God. Yet, paradoxically enough, Maimonides

¹ i. c. 52.

holds that the greater the number of the negative attributes one can rationally assign, the nearer one has reached to a knowledge of God.

Spinoza's doctrine, "*Dei potentiam nihil esse praeterquam Dei actuosam essentiam*," and similar statements bear a very close resemblance to an opinion of Maimonides, which Prof. Pearson apparently thinks must be sought for in that author's *Yad*. But in the *Guide* we find the very same principle. "The essence of God is identical with his attributes" (i. 204-7). "God includes in his Unity, the *intellectus*, the *intelligens* and the *intelligibile*" (i. 252-9). This opinion is far from original. It is the common property of several Jewish philosophers, and the idea is probably as old at least as the *Sepher Yetsira*, and is to be found in the *Cusari* of Jehudah Halevi. In human perception, Maimonides distinguishes the thinker, the hylic intellect and the abstract form of the object perceived. When the intellect is active, these three coalesce;—the intellect *is* the comprehension. God being an active intellect—always actual and never potential—the principle which applies to the human intellect only at intervals, applies *always* to God.¹

Maimonides must not be judged merely from the positive results of his philosophy. There are certain tendencies to be noted in him which are perhaps the more deserving of praise from the very fact that he did not unreservedly abandon himself to them. This is at once the strength and the weakness of Maimonides. Spinoza² accuses him of disingenuousness in asserting that he could always find in Scripture the truths that reason revealed: that, when his philosophy contradicted the plain utterance of the Bible, he would not therefore suspect the former, but would seek for a new interpretation of the latter. No doubt, Maimonides does confess that he was guided by this principle in his reconciliation of theology with metaphysics. "I do not reject the Eternity of the Universe," says Maimonides,³ "*because* certain passages in Scripture confirm the Creation; for such passages are not more numerous than those in which God is represented as a corporeal being; nor is it impossible or difficult to find for them a suitable interpretation." "Those passages in the Bible, which, in their literal sense, contain statements that can be refuted by proof, must and can be interpreted otherwise."

But this criticism, just as it is, does not allow sufficient weight to a very different aspect of the case. Strange as the statement may appear with reference to a theologian and Aristotelian like Maimonides, no man was ever less a slave to prejudice and authority than he essentially (though not consistently) was. In several passages his indignation breaks out against the men who dare to

¹ Another idea of Spinoza's, quoted in *MIND*, Vol. viii. 349, may be compared with the *Guide*, iii. 283-284.

² *Theol.-Polit. Treatise*, vii.

³ ii. 118.

assert nothing for which they cannot quote chapter and verse. Maimonides held some important points in common with the Arabian Mutakallemim, though he differs from them both in method and in numerous details.¹ The atomic theory, the impossibility of the existence of a substance without accidents, the denial of the infinite, the unreliable character of the senses, are all doctrines against which Maimonides vigorously, and in some cases successfully, protests. But his agreement with the exponents of the *Kalam* on the question of Creation does not moderate his onslaught against their method, for it is their *method* rather than their *results* which he is determined to demolish. And why does he show such hostility to them? Because "first of all they considered what must be the properties of the things which should yield proof for or against a certain creed; and when this was found they asserted that the thing must be endowed with these properties. . . . They found in ancient books strong proofs and valuable support for the acceptance or the rejection of certain opinions, and thought there was no further need to discuss them" (i. 280; cf. 311). With regard to Aristotle the revolt of Maimonides is even more remarkable. Maimonides is a thorough-going Aristotelian, and the student of the great Stagirite might turn with advantage to the opening chapters of Part ii. of the *Guide* for a clear exposition of some of the most important of Aristotle's doctrines. Yet Maimonides differs from Aristotle on the Creation controversy, and ridicules those "who blindly follow" the Greek philosopher—who "consider it wrong to differ from Aristotle, or to think that he was ignorant or mistaken in anything".²

Spinoza does not appear to have fairly taken these suggestive facts into consideration. Maimonides's radical defect he certainly detected; but he failed to perceive that Maimonides was really paving the way for the very independence of the individual mind for which he himself so strongly contended. True, Maimonides

¹ The philosophers of the "Word"—the Arabian Mutakallemim—declared that the existing order of things proves nothing, since conceivably the opposite order is equally admissible. They established in accordance with this view the *Creatio ex nihilo* and the Unity and Incorporeality of God. Maimonides objects to this method on the ground that the Mutakallemim make the existence of God dependent on Creation; and thus philosophers (of the Aristotelian school) denying Creation would thereby overthrow the doctrine of the existence of God. Maimonides accordingly prefers to adopt for argument's sake the belief in the eternity of the universe, and to prove on that basis the existence and unity of God; he then returns on his premiss, and proves Creation. If the latter is admitted, the existence of God follows, for a Creation presupposes a Creator. It may be questioned whether Maimonides was not partly led to follow this course by a latent feeling that his proofs of Creation were but imperfectly conclusive.

² ii. c. 15, which is a most important chapter.

always sought to interpret Scripture in accordance with his views ; but he did not hesitate to arrive at his views independently of Scripture. "Consider," he remarks in one place, "how these excellent and true ideas, comprehended only by the greatest philosophers, are found scattered in the Midrashim" (i. 270). He could not altogether resist the temptation to show that authority was on his side ; but it was impossible for a man to go further in defiance of authority than he did, unless he was prepared like Spinoza to discard authority altogether.

Maimonides may be said to have moulded modern Judaism, and to have proved its ability to satisfy the intellectual and moral necessities of different ages by its adaptability to all. He gave the death-blow to the letter-worship of Scripture against which Judaism was always, when rightly understood, a standing protest ; and he rendered Judaism as free from servility as a dogmatic system well could be. There was naturally a reaction against Maimonides, and neither the ultra-radical nor the ultra-conservative is altogether satisfied with him. But no one can think of understanding the course of Jewish thought, and of the general tendencies of the civilised world as influenced by it, without seriously setting himself to the perusal of the philosopher whose greatest work Dr. Friedländer has so well and ably edited ; and it would, therefore, be hard to exaggerate our obligation to the latest and best expositor of Maimonides.

I. ABRAHAMS.

Les Maladies de la Personnalité. Par TH. RIBOT. Paris : F. Alcan, 1885. Pp. 174.

This new study of M. Ribot's in the domain of pathological psychology is worthy of its predecessors. The author shows here as elsewhere industry and skill in collecting and utilising curious out-of-the-way facts, and a happy facility in setting forth his conclusions.

The subject which M. Ribot has here selected is one peculiarly well fitted to bring out the characteristic excellences of his psychological method. Personality is an idea which in its nature is sufficiently obscure, and which has, no doubt, as the author impresses on our minds, been rendered still more obscure by the disputes of metaphysicians. To dispel this obscurity, and to do this by help of those very physiological considerations which these metaphysicians regard as trivial and irrelevant was just the kind of problem to attract an advanced student of the newer psychology like M. Ribot. He has manifestly thrown himself into the task with ardour. Works on mental disease, descriptions of the curious psychological phenomena which present themselves in the case of the eunuch, the hermaphrodite, the double monster and so forth,—these and a great deal besides are

laid under contribution. The result is a very ingenious essay which goes some way towards solving one of the most difficult problems in psychology.

M. Ribot sets out with a brief statement of his psychological standpoint. This is emphatically the standpoint of the biologist. To our author conscious mental activity is an incidental appendage to a sum of nervous processes, which constitute the real basis of mind and personality. The deepest ground of self-consciousness is thus a physiological fact, namely, the unity of the bodily organism and the representation of the several functions of the organism by the nerve-centres.

Agreeably to this general conception, M. Ribot begins his review of the different disturbances of the feeling of personality with those that he calls "organic". Here there are physical changes to which the perversion of the feeling can be directly referred. The consideration of slight disturbances in normal life, due to depressions, &c., of the vital functions, leads on naturally to the discussion of the graver perturbations which occur in mental disease. In dealing with these, the author refers to the well-known facts of double personality. In this connexion, too, he describes the modifications of the feeling in the case of double monsters and ordinary twins; though he might, I imagine, have made the bearing of the facts on his theory clearer than he has done.

We next come to "emotional disturbances" (*les troubles affectifs*). Here the immediate cause of the perversion of self-consciousness is an alteration in the feelings; but since these, in many cases at least, have definite physical conditions (*e.g.*, that of the subject of castration), it is not easy to distinguish this group of disturbances from the first. The outcome of this section is that "we always come back fatally to the organism". It is true that the author tells us that the personality results from two factors—(a) the constitution of the body with the tendencies and feelings which translate it, and (b) memory. But it is evident that by "memory" is meant here simply the organised memory of the bodily feelings themselves. Indeed M. Ribot, in another passage, takes pains to oppose the contention of metaphysicians that the consciousness of personality is based on memory in the ordinary sense of that term.

After the emotional come the "intellectual" disturbances. The account of these strikes me as less complete than the other chapters. The author in magnifying the rôle of the bodily feelings, seems to underestimate the influence of the intellectual factor. Some of the facts properly belonging to this division of the subject are not referred to at all: *e.g.*, the temporary substitution of a fictitious personality by a sustained effort of imagination. Dickens and other novelists had the power of assuming the personality of their characters, without any alteration of their cœnæsthesia. Here, too, we miss a reference to the effect of

greatly altered surroundings on the consciousness of self. M. Ribot calls attention to the curious circumstance that, whereas loss of skin-sensibility disturbs the feeling of personality, the loss of one of the higher senses leaves it unimpaired. He explains this by saying that sense-perceptions and ideas based on these determine our notion of objective things, but do not condition our consciousness of self. But it may perhaps be contended that great and sudden alterations of the environment produce a palpable dislocation of the normal self-consciousness. A man who has moved but very little from his home is apt to say that he does not "feel himself" when suddenly introduced into new surroundings.

This line of remark naturally leads on to the reflection that the most rudimentary type of self-consciousness is an intellectual product, which is developed *pari passu* with, and in close relation to, the representation of an external world. M. Ribot appears to regard the intellectual idea of self as a convenient framework or "schema" which the real self is always ready to adopt if consciousness happens to be present, but which is in no way necessary to its existence. I confess that I am unable to follow his meaning here. I cannot understand how a mere sum of nervous processes, continuous in space and time, or an accompanying series of bodily feelings continuous in time, can transform itself even into the most elementary form of an *ego*. This idea of self is surely in every case the work of the comparing and constructing mind. And, on the other hand, may it not be said that the failure of the disordered mind to unify its past and present in a single self may be referred quite as much to an intellectual as to an emotional cause, *viz.*, the inability to allow for a certain amount of change of experience? No doubt, M. Ribot is right in viewing the organic feelings as a main ingredient in the materials which the mind necessarily uses in building up the idea of self; but they do not, so far as I can see, constitute that idea. Even in the abnormal conditions described by the author we still see the intelligence, enfeebled though it is, striving to piece together a new self. On the other hand, there appear to present themselves in the case of the lower animals all the conditions enumerated by M. Ribot without any idea of self resulting, just because the specific intellectual impulse is wanting.

To say all this is simply to point out the limits of physiological explanation in psychology, not to disparage such explanation. M. Ribot is not a mere physiologist, but a well-read psychologist as well. And I have little doubt that he would be ready to allow that there remains a distinctly psychological problem of personality after physiology and pathology have said their last word. But in the present volume he seems to lose sight of this truth. The frequent polemic with the metaphysicians, *e.g.*, pp. 86 ff., and most of all, perhaps, the remarks on Mill's confession of the insolubility of the problem, p. 169., seem to imply that M. Ribot goes with

the pure physiologists in denying to introspection any part in the elucidation of mental problems like this of personality. This must be my excuse for dwelling so long on the point, and in so doing seeming almost to take up an unfriendly attitude towards a book with the aim and method of which I am on the whole in such cordial sympathy.

JAMES SULLY.

Æsthetik. Die Idee des Schönen und ihre Verwirklichung im Leben und in der Kunst. Von MORIZ CARRIÈRE. Dritte neu bearbeitete Auflage. Erster Theil. "Die Schönheit. Die Welt. Die Phantasie." Zweiter Theil. "Die bildende Kunst. Die Musik. Die Poesie." Leipzig: F. A. Brockhaus, 1885. Pp. xxii., 627; xiv., 616.

Although it cannot be said that no contributions have been made in England to the theory of *Æsthetics*, we have certainly nothing to put beside a treatise such as the present. English criticism of art has usually taken the form of isolated suggestions worked out in a limited field rather than that of systematic theorising on the whole subject of art. This may by some be considered an advantage, as making easier for the critic the purely receptive attitude towards works of art—the fixing of the attention on the impression received without any attempt at judgment of it by arbitrary rules such as were laid down by English and French critics of the last century; and, no doubt, there is some advantage in this attitude as compared with that of the older schools of criticism. At the same time the absence of accepted philosophical principles carries with it greater disadvantages. The present work is well fitted to make clear how much is gained by treating art from a philosophical point of view. It has, besides, the merit of combining with philosophical method an appreciation of art for its own sake and a power of expression sufficient to have made the author's reputation as a purely literary critic. One of the best features of the book is that, whenever it is possible, the judgments of artists on their own art are taken as the basis of the exposition; and perhaps the great advantage that a German has over an English critic, in an attempt to treat systematically the science of *æsthetics*, consists in his having behind him a far larger body of theorising by artists themselves both on art in general and on the limits of the special arts.

The mode of treatment adopted in the present work will be best understood from a sketch of the author's general view as developed in vol. i.; but before proceeding further it may be well to give the briefest possible indication of the chief divisions of Prof. Carrière's book. The more general problems of the philosophy of art, the definition of beauty, the relation of beauty in art to beauty in nature, and the character of *æsthetic* ends as distinguished from

other ideal ends are the subjects of vol. i., the three sections of which are entitled, (1) "The Idea of Beauty" (pp. 1-238), (2) "Beauty in Nature and Spirit; the Material of Art" (pp. 289-434), and (3) "Beauty in Art" (pp. 435-627). This general Part is followed by the treatment of the particular arts in vol. ii., where they are grouped under the heads of "Plastic Art" (pp. 1-329), "Music" (pp. 330-488), and "Poetry" (pp. 489-616).

"The Beautiful" is defined, at the opening of Vol. i., as the harmony of the manifold of feeling and the unity of the idea in a sensible form the perception of which gives immediate pleasure. The element of feeling in art is the individual or personal element, which is the element of concrete reality. It is by reason of this element that a work of art is incapable of complete analysis. The union of the ideal with the sensible element in beauty is manifested in this, that, while beauty cannot be demonstrated to another but must be felt by each, yet at the same time each seeks to obtain from others agreement with his own æsthetic judgments. Beauty as it is perceived in nature is superior to the beauty of art in so far as art cannot completely reproduce all the impressions that are got from any natural object; on the other hand, impressions of beauty occur scattered in nature and can only be obtained at different times and from selected points of view. Art, by the action of the "phantasy" or shaping imagination, collects these scattered impressions and gives to the ideal it has created an embodiment in an individual form. The phantasy has the mediating function in relation to the unity perceived in beauty that is ascribed by Kant to the faculty of imagination in relation to the reason and the understanding. Ideal beauty is for the "phantasy" what the concept is for the reason, what the idea of good is for the will. The world of sensible appearances, which provides the phantasy with material, has more significance for the artist than for the man of science, whose interest is in the general, or for the man of action, to whom the internal disposition is the chief thing. The end of art is to bring into harmony "the manifold of feeling" and "the unity of consciousness" in a perfectly individualised concrete form. It is thus equally distinct from the ends of science and of morals, although the same ideal unity is expressed in all three.

What is to be remarked especially in the author's treatment of his subject throughout is that the distinction between the æsthetic, the scientific and the ethical points of view which he states in the form of a general principle is kept perfectly clear in practice. It is not unimportant to draw attention to this point, for here more than anywhere else the advantages of the philosophical treatment of æsthetics become obvious. The distinction of art, science and morals is indeed a current one in England as elsewhere. But if men of science—the word "science" being taken in its widest sense—are no longer required on every occasion to re-establish the distinction between their own and the

ethical point of view, certainly artists are not in the same fortunate case. We need not go far to find the maxim of "art for the sake of art" treated as a slightly immoral paradox. To quote it in the original French is usually considered an aggravation of the offence against ethics implied in the statement of it. More than ever instructive is it, therefore, to find a German writer who, as we shall see, cannot be accused of neglecting or undervaluing the ethical side of things, treating this formula in effect as a postulate of æsthetic science and of all actual artistic work. Beauty, Prof. Carrière says, is its own end and must be loved for its own sake (i. 264). "No other demand, therefore, may be made of art than that its work shall be beautiful. He who would turn aside the work of the artist for other ends and make it serviceable to other aims takes away the freedom of art and lowers that to a means which fulfils its destination only as an end for itself." The security in the statement of this position and the consistency with which it is taken as a basis throughout can only be explained by the habit of considering art in the light of philosophical principles. From the philosophical point of view it becomes clear at once that in whatever sense truth and virtue are ends in themselves, in the same sense beauty also is an end in itself.

The character of æsthetic contemplation most generally recognised is "disinterestedness". This character has been made use of in psychology to distinguish æsthetic pleasures from mere impressions of sense and the pleasures of "the æsthetic senses" from those that have not the æsthetic character because they are not capable of being shared. Prof. Carrière, while not omitting to bring this out clearly, suggests further application of the character of disinterestedness in the distinctions he draws between the artistic modes of expression and those that are related to them but are of a mixed character. An example of this kind of application is given in the course of a discussion of the relations of poetry to the artistic modes of prose (ii. 501-4), which follows an account of the separation of verse as the language of art from prose as the language of science.

When poetry and philosophy (which at first included science) were as yet undistinguished, their common organ of expression was verse; afterwards, when the desire was felt to describe in detail objective facts of history and of nature, prose, the language of daily life, was elaborated into a new organ of expression adapted to this new purpose. As knowledge returns to unity, as more and more laws come to be grouped under a single law, it again becomes possible to make science the material of poetry, to express truth in the rhythmical form of emotional speech. Not only is this so, but all along the relations of poetry and science are closer than those of science and the other arts. Thus the writing of history, for example, is susceptible of an artistic form comparable to that of epic poetry. And the dialogues of Plato, so far as living persons are represented in them having individual

features, are related to dramatic art. The historian, however, is restricted by facts and by the actual order of events; and the end of philosophic writing is not the concrete presentation of character, but truth in its generality. Here therefore the artistic element either expresses itself imperfectly or is something extraneous to the end of the writer. Again oratory, in its emotional element, has a certain resemblance to lyric poetry. But in listening to an oration the mind is not allowed to rest in æsthetic enjoyment; an appeal is made to the will: hence poetry does not permit the rhetorical except as an element in a whole, as for example in the drama.

It has been said that the true antithesis of poetry is not prose but science. Prof. Carrière's discussion of the relations of the various forms of literary art shows us in what sense this may be accepted. We may say with a certain truth that prose is antithetical to poetry not in itself, but only in so far as it is the organ of science; but we may equally well select another use to which prose may be put, namely, its use as a means of influencing action, and oppose this at once to its artistic elaboration and to its use as a means of communicating knowledge. In this way we arrive at rhetoric as a second antithesis to poetry. This antithesis is better than the first; for, as has been seen, it is especially by the absence of disinterestedness that oratory is distinguished from lyrical verse; and disinterestedness has been selected as pre-eminently the character of art. On further reflection we find that this character of disinterestedness ought not to be taken absolutely as the character of art, but is really common to it with science and philosophy. Now rhetoric, with respect to this character, is equally opposed to philosophy and science on the one hand and to art on the other. And the best critics have found the rhetorical spirit as inconsistent with the spirit of poetry as it is with the spirit of philosophy. On the contrary there is no absolute inconsistency between poetry and science. A truth of science, as Prof. Carrière says, may become poetical under impassioned contemplation.

The element of "strangeness" in beauty, referred to in a well-known passage of Bacon's *Essays*, has of late played an important part in æsthetic theories developed from quite different points of view. It has been made by literary critics the distinctive character of Romantic art, and by Darwin (in the *Descent of Man*) the starting-point of the earliest development of æsthetic feeling in the human race. Both these views have points of contact with Prof. Carrière's account of the origin of art. The mind, he says, in order to obtain æsthetic pleasure from the forms of external things, has need of the stimulus of the unaccustomed. An example of the pleasure thus obtained is seen in the morbid attraction of the horrible and of all strong stimulation (i. 10, 254). The emotion obtained from the unaccustomed does not, however, in itself constitute æsthetic pleasure. There is need further of a

return of the mind on itself after its movement outwards, a calming of the internal agitation caused by this movement. Art brings about that union of "the idea" and of "feeling" in which the harmony of beauty consists by first increasing the intensity of conflicting feelings and then imposing on them "a law of measure," a law in which "freedom" and "order" are reconciled.

Joy in the harmony of beauty proceeds from perception in this harmony of the completion of our own being, the accord in ourselves of nature and spirit, of unity and multiplicity. It has been rightly said that man first perceives external beauty under the form of human personality; hence the personifications in mythologies. And, although afterwards the conception of beauty becomes universalised, it always remains true that as without spirit there is no beauty, so also there is none without sense.

In all the arts equally there is reconciliation of nature and spirit, of sense and the idea; but this reconciliation is effected in different ways. Plastic art is objective, as being a representation of bodies in space. Music is subjective, as having feeling for its content and time for its formal condition. Poetry is especially "the art of the spirit"; uniting the forms of plastic art, "the art of nature," and of music, "the art of feeling". Poetry differs from music and the plastic arts in starting with thoughts instead of feelings or images; but the thoughts expressed by the words of a poem are not there simply for their own sake, but in order to produce in the minds of others the images and feelings that are in the mind of the poet. A poem, both as a whole and in every part, is the expression of a thought in the concrete form of imagination; as a whole and in every part it is also submitted to a musical law, a law of unity in change, which corresponds to a law of the fluctuations of feeling. The author finds in the history of the arts a support for his classification; contending that the objective arts, or arts of nature, are the first to attain perfection, then the subjective arts, or arts of feeling, and lastly those in which there is a balance of the two elements. The same classification is applied to each group of arts in turn. Of the plastic arts architecture is said to be predominantly objective as deriving its forms from external nature; sculpture in a sense subjective, since it begins with the human form, treating this as an expression of the human spirit; while in painting there is co-existence of the objective and the subjective points of view. Music, on the same principle, is considered under the heads of "instrumental music," "vocal music," and the "combination of vocal and instrumental music" (in opera, &c.). Lastly, poetry is regarded as objective in the epic, subjective in the lyric, and as a union of epic and lyric elements in the drama.

The general principles here may be traced to Lessing's *Laocoon*; the grouping of the particular arts and the theory of the three stages of art to the influence of Hegel. These last cannot be regarded as an established part of æsthetic science, as the prin-

ciples derived from Lessing can ; but at least they give occasion for abundance of interesting comparison of the methods of the various arts and their diverse modes of treatment of similar subject-matter. It is, however, a curious example of the power of theory to modify the facts when, in the middle of an interesting passage on the relations of artistic genius to its predecessors and to the past development of the race, we find the author illustrating the general law of dependence by a remark which implies that the culmination of dramatic art in Shakespeare was impossible till the epic and the lyric had been perfected in English literature (i. 537). At the same time, while a law of the development of poetic art seems here to be forced on the facts rather than inferred from them, no attempt is made in Prof. Carrière's classification to subordinate one art to another in accordance with this law. Each is said to be, in its own manner, an expression of the whole. This absence of any attempt to place the arts above or below one another in rank is an example of avoidance of the dangers of the method of purely speculative deduction, to which, indeed, it was from the first the author's aim to oppose a more concrete treatment of æsthetic questions.

According to the author's view, the ideal unity expressed in art, in science and in religion is essentially the same. But here again, as has been seen already, he does not subordinate any one of these ideal ends to another. Indeed, he says explicitly, "Art, Religion, Science, each of these in its kind is a highest point, a summit of human life" (i. 287). The metaphysical doctrine stated above implies, however, that each ideal has relations to the others ; and in one place beauty is described as the completed form, in the world of appearances, of the true and of the good. In all art we are to see the reconciliation of the principles of order and freedom, and in the drama especially the reconciliation of the individual with the moral order of the world.

Since the drama, in the author's view, if not the supreme, is yet the most developed form of poetic art, as poetic art is of art in general, this application of his metaphysical doctrine may be selected for special examination. But first of all it is necessary to point out that whether this theory be accepted or not, it in no way implies a departure from the most general principle of æsthetic criticism, that art must be judged according to its formal quality. For this theory is an attempt to determine the relation of matter to form in art, not an attempt to substitute judgment on matter for judgment on artistic form. It affirms that actually the highest types of dramatic art, already accepted as such on grounds distinct from any opinion about their meaning or purpose, will be found as a matter of fact to contain a reconciliation of man with the external order, and that this order is conceived by the dramatist, consciously or unconsciously, as ethical. The hero of a tragedy, according to this view, is represented as triumphing (at least subjectively) by submission to the moral order of the

world, or as crushed through resisting it. The same theory is applied by the author to comedy. The reconciliation that is the end of the drama is here brought about in the mind of the spectator by the representation of that which is really deserving of contempt as in conflict with the moral order, and in presence of this, the true reality of things, as appearing in its intrinsic nothingness.

A theory such as this is not open to the objection that it is a direct application of ethical canons to art; and we may admit that Prof. Carrière's theory explains some dramatic effects. To take an example from tragedy, the background of *Macbeth* is undoubtedly a moral background. But when we try to apply this theory, say to *Hamlet* and *Lear*, especially the last, it seems less adequate. An interpretation of these plays in terms of an ethical theory of things can only be carried out (as Prof. Carrière tries to carry it out in the case of *Lear*) by the selection of episodes. For in these most of all among modern dramas we are made conscious that behind "the moral order of the world," the creation of the human spirit, are the elder powers—"Fortuna omnipotens et ineluctabile fatum". Perhaps fate is most prominent in the ancient, fortune in the modern drama. And the fate of the Greek dramatists has in general more of an ethical character than the impersonal background of Shakespearean tragedy. An illustration of this distinction may, however, be found in *Macbeth*, where the ruling conception approaches nearer than elsewhere in Shakespeare to the Greek fate. But in the ancient as well as in the modern drama the ethical character belongs rather to the hero of the tragedy, who is brought into conflict with a non-moral order of things, than to anything in the external order itself. What is said, in this mode of considering it, of tragedy, ought to be applicable, in Prof. Carrière's view, to comedy also. Now when we consider the higher kinds of comedy and the humorous treatment of things generally as opposed to the tragic, is there not just as much difficulty in reconciling his theory, say, with the treatment of life by Cervantes and Molière? Can the non-ethical character of the background of human life be brought out more strongly than it is, for example, in *Don Quixote* and in *The Misanthrope*?

This does not mean that the higher forms of art contain no solution of problems that are at least in part ethical. It shows, however, that the view taken of the final questions of æsthetics must depend to some extent on the kind of philosophy we start with. Perhaps the objection may be made here that the questions now touched upon, whether the author's view or that which has been suggested in contrast with it be accepted, are not properly æsthetic questions at all; that the irrelevant consideration of subject-matter has been introduced in a new shape,—if not by the application of ethical tests to art, then by the application of metaphysical tests. The reply to this objection has been partly

indicated above. The question discussed is not "What is the true conception of the universe?" but "What is the ruling conception in works of art already admitted to be highest in their kind?" And it is not proposed to pass judgment on a work of art according as it embodies a true or a false theory of things. The value of a work of art, it is acknowledged, must be decided by the æsthetic impression got from it and by nothing else. At the same time, anyone taking this view may or may not hold that, as a matter of fact, in the highest poetry a true theory of things will be found implied.

It is not, however, in any theory of the relation of artistic form to different kinds of philosophical or ethical content, in whatever way such a theory may be understood, that we ought to find the characteristic doctrine of a treatise on *Æsthetics*. The central idea of Prof. Carrière's book is rather to be seen in his manner of viewing beauty as consisting in a certain unity of idea combined with vividness of distinctly individualised feeling expressed in concrete form. It is difficult to see how the elements of the general conception of the beautiful could be better indicated than in Prof. Carrière's formula; and he never allows this formula to become a mere generality, but constantly applies it with success to the decision of actual æsthetic questions. We have, for example, an interesting application of one part of the formula when he explains the strength of the impression made by the depth of meaning and clearness of form of the masterpieces of Greek tragedy from the repeated introduction on the stage of the same myth and consequent absence of interest either on the part of the dramatist or the spectator in the subject-matter as distinguished from the form. In confirmation of his view of the subordinate position of "invention" as an element in poetic art, he points out that modern dramatists also have seldom invented their plots, but have taken their material as much as possible from history or from stories already extant. Thus the modern as well as the ancient dramatist has been able to gain freedom to impose on his special subject-matter the unity of idea characteristic of all art. But while this unity is shown to be an essential element in a work of art, we are never allowed to forget that there is also a concrete element, the element of personality. For the assigning of minor artistic significance to interest of plot and to details of life does not, with the author, tend to pass into an exaltation of the element of generality such as would make art merely the expression of an idea and nothing more. The individual element in art, indeed, is not this element of fact, of actual detail of life to which a lower place is given, but the element of vivid personal feeling. The artist has to select impressions both of inner and outer experience and impose on them the law of his own personality; and this, as Prof. Carrière shows, is what constitutes "style" in the most general sense. In his discussion of such problems as those of style and of artistic "inspiration" nothing can be better than the

way in which he assigns their due place to the unconscious and the conscious elements in genius, and to innate faculty and acquired dexterity in all kinds of artistic production. The historical relations of the artist, too, are extremely well treated. It is a favourite idea of the author, as it has been of other writers on art, to regard the artist as the organ of his time and of his race, in whom at length both his own age and the past of which it is the product have become articulate. In this view, of course, the obligations of the artist to his predecessors and his relations to the knowledge and ideas of his time are not forgotten. Sometimes even, as was pointed out in one case above, this historical view leads to a certain exaggeration of the dependence of the individual man of genius on the completion of previous stages of artistic progress. But here again it is made clear that the individuality of the artist is after all the chief thing; that the personal element must always be superimposed on the character of the artist as an organ of the race. This is especially well brought out in the section on "Style" (i. 600-620), where a distinction of Goethe is developed into a theory of the relation of mere "imitation of nature" on the one hand, and of the exaggeration of a personal "manner" on the other, to the balance of a true "style," in which the personality of the artist is fully expressed but always in such a way that the object is treated appropriately and that the universal or typical element is clearly seen through the individual expression in beautiful form.

It would be easy to multiply examples of the author's felicitous applications of his general view in comparisons of the effects of the different arts; such as his illustration from painting and sculpture of the different kinds of unity required by the epic, "the poetry of event," and the drama, "the poetry of action" (ii. 545, 587); but without references to more special discussions, which besides, would only give an inadequate idea of the interest of these volumes, enough ought to have been said already to show the importance of Prof. Carrière's book alike for literary and for philosophical criticism.

T. WHITTAKER.

Literarische Fehden im vierten Jahrhundert vor Chr. Von GUSTAV TEICHMÜLLER. 2 Bde. Breslau: Koebner, 1881 u. 1884. Pp. xv., 310; xviii., 390.

A preliminary notice of this work was given in *MIND*, Vol. x. 311; and the first volume of it has been referred to, with appreciation of the skill and learning it displays, by Mr. Benn in the preface to his *Greek Philosophers*. Whether English students of Greek philosophy will go beyond Mr. Benn's opinion, that Prof. Teichmüller's researches "demand some public acknowledgment"—such as even a short review can give—seems doubtful.

Prof. Teichmüller has tried, he says in his Preface, "to recover her royal dignity for Philosophy," amid what he characterises as the general plebeianism of modern thought. This has necessarily led him to deal with Plato. And to understand Plato's teaching we must find out the chronological sequence of his works, and their relation to the *Parteien* of his time. "The Platonic question has entered on a new stadium:" all previous methods in its investigation have failed: Zeller (whom Prof. Teichmüller always recommends to his classes as giving the best introduction to such investigations) is absolutely deficient in method, or at best employs only the "principle of the majority": Susemihl and other well-known names are only historically interesting. Prof. Teichmüller's own method is the "comparative method with unlimited perspective": which admits of a twofold division, into special and universal. The former is based on the artistic character of Plato's Dialogues, "which is here" (in these volumes) "for the first time clearly settled": the latter is a "heuristic" method, declared to be unknown to Logic hitherto, and based on the "principle of co-ordination,"—described also, in Prof. Teichmüller's peculiar language, as "syllogismus investigatorius".

The general result attained by the application of the method is, that the dialogues are *Streitschriften*, polemical writings called forth by the various "literary feuds" in which Plato, according to Prof. Teichmüller, was throughout his life engaged. Thus (1) the *Phaedo* and the *Symposium* would not have been written, at least in the form in which we know them, but for Polycrates's attack upon Socrates (i. 122); and (2) the *Laws*, containing references to the *Nicomachean Ethics*, while the *Nicomachean Ethics* contains none to the *Laws*, furnishes a reply to Aristotle's criticisms, e.g., on the ἐκούσιον, of Plato (i. 162 ff.). Conclusions like these—which make two of the most important of Plato's works merely answers to an obscure rhetorician, and presuppose the composition of the *Ethics* by Aristotle at the age of 32 or 33—require firm premisses and unimpeachable argument. In a review it is not convenient to go into such detail as Prof. Teichmüller's exposition of his theory in (2) would demand: he gives six "quotations or allusions" in the *Laws*, which he interprets as bearing on Aristotle's criticism: it must suffice here to express an opinion that no such reference is unavoidably forced upon an unprejudiced reader, and that several of his attempted references (e.g., that about the πρᾶξις, pp. 172, 3) postulate the necessity of *literarische Fehden* between any two writers who in the same age utter any but the same thought about the same thing. In regard to (1) the *Phaedo* and *Symposium*, Prof. Teichmüller may best speak for himself, with nothing extenuated nor ought set down in malice. "As Polycrates's miserable accusation against Socrates," he says, "had appeared, and as Isocrates, the most eminent stylist of the time, had also lowered Socrates's

reputation by saying that Socrates had never been so highly praised as by his would-be accuser Polycrates, who had clumsily fabricated the story of Alcibiades's being taught by Socrates, we can understand why Plato, speaking under the mask of Socrates, was disposed to resist these slanders, and on the one hand to write his *Phaedo*, on the other to use the occasion of his investigations into the being of love or of philosophy, in the *Symposium*, for an exposition—of the relations between Socrates and Alcibiades." Prof. Teichmüller's method may fairly stand or fall by this instance. Anyone who accepts it here will find little difficulty in its other results; will acquiesce in the dating of the *Phaedrus* considerably later than the *Republic*, and in the determination of date for the *Protagoras* by the mention of peltasts, who must be Iphicrates's peltasts, because the allusion thus gains in point; nor will he shrink from the conclusion that Dionysodorus, in the *Euthydemus*, is Lysias. True, the very Germans have been surprised at this (the "many surprises" which his researches offer being mentioned with pardonable pride by Prof. Teichmüller himself), but then it is only because they do not see that (1) Plato meant to hit Antisthenes through Lysias; (2) Diogenes Laertius quotes Antisthenes as calling himself *παιδαγωγικός*; (3) the name Dionysodorus is that of a teacher of strategy in Xenophon's *Memorabilia* (iii. 1, 1); and (4) therefore Lysias must be Dionysodorus. One more step, and we shall find ourselves accepting the result that Plato is (the phrase would lose by translation) a "*deutlich bestimmtes Centrum von Co-ordinationen*" (ii. 9).

The labour and ingenuity which these speculative combinations show will probably have the effect called stimulating on some readers: it is useful now and then to ask questions that can have no answer, or even to get answers to them. More readers perhaps will be deterred by the curious self-assertion, and hostility to holders of different opinions from his own, which Prof. Teichmüller does not care to repress. One might almost fancy that in the subjectivity of his method he has read himself into Plato; and that his own constant polemic has filled the fourth century B.C., in "unlimited perspective," with a good deal of the "literary feud" he there discovers.

ALFRED GOODWIN.

VIII.—NEW BOOKS.

[*These Notes (by various hands) do not exclude Critical Notices later on.*]

Institutes of Logic. By JOHN VEITCH, LL.D., Professor of Logic and Rhetoric in the University of Glasgow. Edinburgh and London: Blackwood & Sons, 1885. Pp. ix., 551.

This considerable treatise—"designed both for those who are commencing the study of Logic and for those who have gone beyond the elements to the higher questions of the science"—is laid out on the traditional lines. Parts ii.-iv. deal successively with "Concepts and Terms" (pp. 165-219), "Judgment" (pp. 220-336), "Inference" (pp. 337-551), after a consideration of "The Laws of Thought" (pp. 112-164), with a view of "Logical Psychology" and "Historical Notices," in Part i. The historical notes interspersed throughout give the work a special interest and value, and there is abundance of lively polemic (directed mainly against Hegel on the one hand and Mill on the other) to enliven the exposition; which, for the rest, should receive all the attention due to the author's mature experience as a logical teacher.

Scottish Philosophy: A Comparison of the Scottish and German Answers to Hume. By ANDREW SETH, M.A., Professor of Logic and Philosophy in the University College of South Wales and Monmouthshire. Edinburgh and London: Blackwood & Sons, 1885. Pp. 218.

The first outcome of a Philosophical Lectureship in the University of Edinburgh, recently founded by Mr. A. J. Balfour for a term of three years and held by Prof. Seth. It was the desire of the founder that "the Lectures should be a contribution to philosophy and not merely to the history of systems"; accordingly, in the first course of six (delivered in the spring of last year), historical is subordinated to material consideration. The subject is one that called eminently for treatment, and appears (on a first glance) to have been handled in a very comprehensive and equitable spirit. The topics taken up are, in order: (1) The Philosophical Presuppositions: Descartes and Locke; (2) The Philosophical Scepticism of Hume; (3) Reid: Sensation and Perception; (4) Reid and Kant; (5) The Relativity of Knowledge: Kant and Hamilton; (6) The Possibility of Philosophy as System: Scottish Philosophy and Hegel. In his second course, Prof. Seth will pursue the consideration started in the final lecture.

Hobbes. By GEORGE CROOM ROBERTSON, Grote Professor of Philosophy of Mind and Logic in University College, London. ("Philosophical Classics for English Readers.") Edinburgh and London: Blackwood & Sons, 1886. Pp. vii., 240.

"Small as this volume is, untoward circumstances have prevented its completion till long after the first third of it was already in print. The delay is only too likely to have affected the unity of treatment; still, the original design has been adhered to in the main. That design was, even within such narrow compass, (1) to bring together all the previously known or now discoverable facts of Hobbes's life; and (2) to give some kind of fairly balanced representation of the whole range of his thought, instead of

dwelling only upon those humanistic portions of it by which he has commonly been judged. Readers will not proceed far before they apprehend the reason why the account of the 'System' has here been imbedded in the 'Life'—in departure from the usual order of exposition in books of the kind. More than of almost any other philosopher, it can be said of Hobbes that the key to a right understanding of his thought is to be found in his personal circumstances and the events of his time."

The Politics of Aristotle. Translated into English, with Introduction, Marginal Analysis, Essays, Notes and Indices, by B. JOWETT, M.A., Master of Balliol College, Regius Professor of Greek in the University of Oxford, &c. Vols. i., ii. 1. Oxford: Clarendon Press, 1885. Pp. cxlv., 302, 320.

This important work—first begun by Prof. Jowett about fifteen years ago in connexion with his Platonic studies—will be reviewed later on. It has come to hand at the last moment, and there is time only to mention that while Vol. i. consists of Introduction (after a few pages of Preface) and Translation, Vol. ii., of which the present first part is composed of Notes, will be completed shortly (in a second part) by a collection of Essays, which promise to be of great interest. They will deal not only with the *Politics* (in a variety of aspects) but also with the life and, to some extent, the general philosophical work of Aristotle. The Indices, due to the hand of the translator's "friend and secretary," Mr. M. Knight, are of notable excellence.

Kant's Introduction to Logic and his Essay on the Mistaken Subtlety of the Four Figures. Translated by THOMAS KINGSMILL ABBOTT, B.D., Fellow and Tutor of Trinity College, Dublin. With a few Notes by COLERIDGE. London: Longmans, Green, 1885. Pp. 98.

To what he has previously done for the spread of Kant's doctrine, by translation of the more important ethical works, Mr. T. K. Abbott now adds by his present version of the general introductory part of the *Logik* (issued by Kant's pupil Jäsche in 1800), pp. 1-78, and also of the earlier essay *Die falsche Spitzfindigkeit der vier syllog. Figuren* (1762), pp. 79-95. The body of the *Logik* he leaves aside, as having in it too much of the traditional School-doctrine and not enough of Kant's own thought to justify translation. The notes taken from Coleridge's copy of the *Logik* in the British Museum are but three short jottings.

Outlines of the History of Greek Philosophy. By DR. EDWARD ZELLER. Translated with the Author's sanction by SARAH FRANCES ALLEYNE and EVELYN ABBOTT. London: Longmans, Green, 1886. Pp. xv., 363.

The *Grundriss* here translated appeared at the end of 1883, having been undertaken by the distinguished author (in response to requests for such a general sketch of Greek philosophy from him) as soon as he had completed the third edition of his great historical work. A fit interpreter was at hand in Miss Alleyne, who had already done excellent service in her rendering of various parts of the *Geschichte*; but we learn (now for the first time), with sorrow, from the preface supplied by the co-translator who took up the task at p. 90, that "in the prime of life and in the full vigour of her powers she died, after a month's illness, August 16, 1884". Mr. Abbott pays, from personal knowledge, a high tribute to her intellect and character; and the loss to the cause of philosophical study in this country by her death will be widely felt. She already had it in view, on comple-

tion of these *Outlines*, to add the second division of Part iii. of the *History*, concluding the whole work, to the *Eclecticism* which, in 1883, came last from her diligent pen. Intended, in the first instance, for elementary students, the present volume—from the hand of such a master as Zeller—has plenty of instruction for more advanced readers also. Naturally, it follows the lines of the *Geschichte*.

Charles Darwin. By GRANT ALLEN. ("English Worthies.") London : Longmans, Green, 1885. Pp. 206.

The author "has endeavoured to present the life and work of Charles Darwin viewed as a moment in a great revolution, in due relation both to those who went before and those who come after him"; and, bringing a wide knowledge with perfect enthusiasm to the task, he has produced an effective and even brilliant piece. The psychological and other humanistic implications of Evolutionism are, of course, not overlooked, whether as suggested by Darwin himself or as worked out in the system of Mr. Spencer; but by the side of these some other names of the century that have passed before as great need hardly have been held in such small account as at p. 198.

The Miscellaneous and Posthumous Works of HENRY THOMAS BUCKLE. A new and abridged Edition. Edited by GRANT ALLEN. 2 vols. London : Longmans, Green, 1885. Pp. viii., 433; viii., 421.

Of all the reactionaries or the laggards who failed to get upon the evolutionary track, Buckle receives the hardest cut in the *Charles Darwin*. Was it because Mr. Allen had just been wrestling with the labour of bringing Miss Taylor's original three bulky volumes into the compass of these much handier two? It can have been no easy task, and the service rendered to Buckle's memory by the omissions is considerable. As the work now stands, less than half (while yet enough) of Vol. ii. is occupied with "Extracts from the Common Place Book"; "Fragments" run back from ii. 254 to i. 200; preceded by the longer piece "Reign of Elizabeth" from i. 143. Miss Taylor's Biographical Notice, and the originally reprinted papers "Influence of Women," "Mill on Liberty," with Letter on Pooley's Case, come first.

Movements of Religious Thought in Britain during the Nineteenth Century. Being the Fifth Series of St. Giles' Lectures. By JOHN TULLOCH, D.D., LL.D., Senior Principal in the University of St. Andrews. London : Longmans, Green, 1885. Pp. xi., 338.

Of this series of eight lectures, that which has most philosophical interest is the sixth, on "John Stuart Mill and his School". Most of the school seem to the author to have been entirely wanting in "spiritual instinct". The younger Mill, although, like his father and the rest of "his school" (described as founded by James Mill and as including G. H. Lewes), he insisted on judging Christianity from its worst instead of from its best side, had "far higher instincts" than the more consistent members of the school such as Grote, who was "more a Millite than John Stuart Mill himself". Yet, as "men are not supposed to be and cannot be experts in anything the very rudiments of which they have never learned," we ought not to look upon his writings "as possessing any special authority on the subject" of religion. He has done service, indeed, to religious thought "in indicating everywhere the moral side of religion," but his chief service is to have shown by "clearing the marches between the great lines of thought" that "determinism in philosophy leads to the negation

of all religion". Henceforth it is clear to both sides that "religion may be tacked on by faith or superstition to a Determinist Philosophy or Doctrine of Necessity, but it cannot be rationally evolved from it".

Sermons. By MARK PATTISON, late Rector of Lincoln College, Oxford. London: Macmillan, 1885. Pp. 298.

These thirteen sermons by Pattison—nine University and four College, mostly belonging to the time of his mental maturity, from 1861 to 1871, but including four of an earlier period (1847-51)—have not the intrinsic philosophical importance of Butler's famous fifteen; but they are a real contribution to philosophy all the same, or at least they disclose a more serious philosophical vein in their author's mind than any of his other writings. Some of them give, with a certain continuity, a view of the relation of religion to the historical development of philosophy early and late, that may serve henceforth as a general framework for the celebrated essay of 1860, in which he described with such striking effect the "Tendencies of Religious Thought in England, 1688-1750". These and others also go some way to defining his ethical position. We hope to return, later on, to a volume which "the Editors" (whoever they are) have done a real service to the philosophical thought of the time in giving to the public.

The Idea of God as affected by Modern Knowledge. By JOHN FISKE. London: Macmillan, 1885. Pp. xxxii., 173.

Man's Destiny (see MIND, Vol. x. 302) was a first Address to the Concord School of Philosophy, and is followed by this second. Mr. Fiske was glad of the opportunity of now speaking about Theism as, in the former Address, he spoke of man's future—in both cases defining more precisely, with the full consciousness first reached "two years ago" (p. xxi.), but otherwise not altering, the positions which, as he contends, he had already taken up in *Cosmic Philosophy* (1874) and *The Unseen World* (1876). Without abating aught from his former condemnation of the teleological method in science, he sees "no reason why, when a distinct dramatic tendency in the events of the universe appears as the result of purely scientific investigation, we should refuse to recognise it". He sought to prove such tendency in *Man's Destiny*, taking it, though in no "limited anthropomorphic sense," as "the objective aspect of that which, when regarded on its subjective side, we call Purpose". And so now he urges, "there is a reasonableness in the universe such as to indicate that the Infinite Power of which it is the multiform manifestation is psychical, though it is impossible to ascribe to Him any of the limited psychical attributes which we know, or to argue from the ways of man to the ways of God". Taken together, the two Addresses contain the bare outlines of a theory of religion which the author hopes at some future time to elaborate into a work on the true nature of Christianity.

Philosophy and Experience. An Address delivered before the Aristotelian Society, October 26, 1885 (being the Annual Presidential Address for the Seventh Session of the Society). By SHADWORTH H. HODGSON, Hon. LL.D., Edin., Hon. Fellow of C.C.C., Oxford, President. London: Williams & Norgate, 1885. Pp. 123.

The President of the Aristotelian Society here passes from the distinction between philosophy and science (drawn in his last Address) to the distinctions within philosophy itself, in the broader sense in which it "embraces all analysis of fact, including the contrast between itself and science". The first two rubrics of philosophical method, "Distinction of

Aspects" and "Analysis of Elements," having been briefly recalled, the third and fourth rubrics, "The Order of Real Conditioning" and "The Constructive Branch of Philosophy," are treated at greater length. Under the third rubric the positive sciences enter the philosophical system "on the footing not of being prescribed to, but of prescribing". Yet the incorporation of the whole system of the sciences would not complete philosophy. Positive science, like common-sense, treats objects as rounded-off totals, as "absolutes"; while for philosophy experience as known remains always bounded by an unknown beyond itself. Construction of the unknown out of previous analysis is the problem of the fourth rubric of philosophy. Of this Unknown we can only affirm with speculative certainty *real existence, infinity and continuity with the known*. But the questions of the fourth rubric, the Constructive Branch of Philosophy, "escape the grasp of speculation, only to fall within the province of practice, and its highest function of practical judgment, conscience". Thus, without departure from the basis of experience, Philosophy becomes in the full sense a *Rationale of the Universe*; and there is no problem, whether soluble or not, that does not at least "readily fall into rank, and present itself for treatment, under some one or more of its four rubrics, so soon as the method of asking first *what* and then *how comes* is applied to it".

Ecclesiastical Institutions: Being Part vi. of *The Principles of Sociology*. By HERBERT SPENCER. London: Williams & Norgate, 1885. Pp. 671-853.

The delay of three years and a half since the publication of Mr. Spencer's previous Part, *Political Institutions*, has been mainly due, readers will grieve to learn, to the "ill health which has, during much of the interval, negated even that small amount of daily work which he was previously able to get through": the remaining two Parts of Vol. ii.—*Professional and Industrial Institutions*—may, he hopes, be more promptly completed; but, he adds more despondingly, "it is possible, or even probable, that a longer rather than a shorter period will pass before they appear—if they ever appear at all". The final chapter, "Religious Prospect and Retrospect" (pp. 827-43), is, save for an introductory paragraph with one added sentence before the last and a few verbal improvements, identical with the paper published in *The Nineteenth Century* a year ago, which gave rise to so much lively discussion.

Illustrations of Unconscious Memory in Disease, including a Theory of Alterations. By CHARLES CREIGHTON, M.D. London: H. K. Lewis, 1886. Pp. xvi., 212.

Dr. Creighton has here written a book the special scientific value of which we have not yet had time (supposing we had competence) to estimate, but a word of immediate recognition is due to the general observations mostly contained in c. i. ("Prolegomena on Memory and Organic Memory," pp. 4-16), with which he passes to the consideration of the physiological and (chiefly) pathological facts that concern him. While making reference to different philosophical thinkers, he may be said to base mainly upon Hering's deliverance (1868) on "Memory as a general Function of Organised Matter". He has, however, so completely assimilated this idea in connexion with some suggestions that have fallen from Prof. Bain, as to be able to propound a doctrine on the relations of Memory and Generation in terms of striking felicity, which no one can read and not become curious to see how far the author may be able in the body of the work to make good his claim (p. 2), that "the description of a certain class of maladies according to the phraseology of memory and habit" is "a real description and not a figurative".

The Springs of Conduct. An Essay in Evolution. By C. LLOYD MORGAN.
London: Kegan Paul, Trench, 1885. Pp. 317.

The author's object has been "to provide such of the general public as have the appetite and digestion for this kind of mental food-stuff with some account of the teachings of the modern philosophy of evolution in the matter of science and conduct". Of the representatives of "science and the philosophy that is based upon science" whose teaching he has himself assimilated, probably Clifford has influenced him most. In Part i. (on "Knowledge"), for example, he follows Clifford in his exposition of the social origin of the conception of objects, and in his distinction of knowledge of objects from knowledge of 'ejects'; in Part ii. ("The Study of Nature") he adopts the position that the only Uniformity of Nature we can know is "a practical uniformity"; and in Part iii. ("Through Feeling to Conduct") he contends that there is no knowledge that has not some bearing on action. The test of truth is "prevision". "Practically our object is to be able to guide our actions aright in the future. Any theory which enables us to do this is practically a true theory." This is applied to knowledge of the past. When, for example, we say that the theory of evolution is true, we mean that from a knowledge of this theory the existing facts of biology could have been predicted. Among incidental positions may be mentioned one that has already been maintained by the author in *Nature* (against Mr. Romanes), viz., that "no science of comparative psychology from the ejective standpoint is possible" (p. 164). Consciousness the author (here following Mr. Romanes) holds to be the accompaniment of delay in response to stimuli, and at the same time of "diffusion" (in accordance with Prof. Bain's "law of diffusion"), which seems to him a still more important circumstance. The positions as to conduct in general by which he leads up to ethics are that, "in aiming at efficiency we are taking our best course to obtain pleasure," while ultimately choice is "determined by considerations of happiness". He insists on the social origin of all morality properly so-called. From Mr. Spencer he takes the principle that "knowledge has to be converted into feeling before it deeply influences our actions". The end of conduct is finally stated thus: "That which, under its purely rational aspect, is greatest perfection, is, under its emotional aspect, greatest happiness" (p. 309).

Scientific Meliorism and the Evolution of Happiness. By JANE HUME CLAPPERTON. London: Kegan Paul, Trench, 1885. Pp. xii., 443.

This is a book of 'pragmatic philosophy,' written mainly for social edification. It is at once inspired by great warmth of feeling and marked by bold and plain handling of practical questions now pressing. Some few chapters touch on matters of principle—as on "Happiness," "Development in Morals," "Evolution of Modern Sentiments". The author, while taking George Eliot's coinage for her title, also gives to George Eliot the foremost place among her teachers.

Anthropoid Apes. By ROBERT HARTMANN, Professor in the University of Berlin. With 63 Illustrations. ("International Scientific Series.") London: Kegan Paul, Trench, 1885. Pp. 326.

This book deals chiefly with the morphology and distribution of the anthropoid apes (the gorilla, chimpanzee, orang and gibbon); but much material is also to be found for the study of their intelligence and their emotional characters, both in captivity and in a state of nature, especially in cc. v. and vi., the last of which (pp. 259-284) is entirely devoted to "Life in Captivity". The last section of c. iii. (pp. 192-209) contains a

comparison of the brain of anthropoids with the human brain, and a short discussion, anatomical and psychological, of some cases of microcephaly. It is found that in these cases the negative but not the positive characters of the intelligence of apes can be detected; "the instinctive side of psychological activity" being (as Virchow's researches led him to conclude) "almost wholly absent". In anatomical structure, on the other hand (including that of the brain), the ape-like character is often very strongly marked.

Jacob Böhme: His Life and Teaching, or Studies in Theosophy. By the late Dr. HANS LASSEN MARTENSEN, Metropolitan of Denmark. Translated from the Danish by T. RHYS EVANS. London: Hodder & Stoughton, 1885. Pp. xvi., 344.

This book, the last of Dr. Martensen's three most important works to be translated into English, is a very intelligible and sympathetic presentation of the theosophical speculations of Jacob Böhme. Some introductory sections (pp. 1-52) give a short account of the life of Böhme, and of theosophy and its problem as conceived by him. The author himself distinguishes theosophy as "objective theoretical mysticism" from "subjective practical mysticism". He thus distinguishes Böhme's conception of God from that of the mystics:—"While Mysticism . . . defines God as the unvarying nameless One, for whom every designation is inadequate and who transcends every conception, because every conception contains contrasts while God is above all contrasts, Böhme demands a God who manifests himself in differences, in contrasts, in definite relations; and only this God is to him the true God." There is a pantheistic element in Böhme; but Hegel wrongly interpreted him "in a purely pantheistic sense," having but a superficial acquaintance with his writings, and being disposed to "Hegelianise him". Böhme's special forerunners were "the whole band of German mystics, Eckehart, Tauler, Suso and the author of the *Theologia Germanica*"; and, although it is impossible to prove any direct influence, "still an indirect influence from mediæval Mysticism as well as from the Kabbala," Dr. Martensen thinks, "can scarcely be denied". He was, besides, influenced by 16th century ideas of magic and alchemy, and especially by the ideas of Paracelsus as well as "by his certainly barbarous terminology".

The Blot upon the Brain: Studies in History and Psychology. By WILLIAM W. IRELAND, M.D., Edin.; Formerly of H.M. Indian Army, &c. Edinburgh: Bell & Bradfute; London: Simpkin, Marshall & Co., Hamilton, Adams & Co., 1885. Pp. 374.

The papers collected in this volume deal chiefly with hallucinations and the phenomena of insanity continuous with them. "A hallucination," the author holds, "is always something pathological." "There is no dividing line between sanity and insanity. As the eye is not perfectly achromatic, the mind is probably never perfectly sane." Three papers are devoted to "The Hallucinations of Mohammed, Luther, and Swedenborg," "The Character and Hallucinations of Joan of Arc," and "St. Francis Xavier, the Apostle of the Indies"; two to "The Insanity of Power" and "The Hereditary Neurosis of the Royal Family of Spain". The subjects of other papers are "Fixed Ideas," "Folie à deux," "Unconscious Cerebration," "Thought without Words and the Relation of Words to Thought," "Left-handedness and Right-headedness," "Mirror-writing," "The Dual Functions of the Double Brain". The author has collected information from a wide range of authorities. On the whole he shows himself more anxious to give the facts copiously than to come to definite conclusions as

to their causes. In discussing "the dual functions of the brain" for example, he points out how little significance is to be attached to the statements of patients with "double personality" as to the seat of consciousness. "The insane are quick to catch at new scientific notions to explain their delusions. Complaints of being electrified and magnetised against their will have long been common. . . . In a similar fashion the medical superintendents of asylums will hear many whimsical applications of the conception of the dual functions of the brain should it become popularised" (pp. 344-45).

Fichte's Science of Knowledge. A Critical Exposition. By CHARLES CARROLL EVERETT, D.D., Bussey Professor of Theology in Harvard University; Author of *The Science of Thought*. ("Griggs's Philosophical Classics.") Chicago: S. C. Griggs & Co., 1884. Pp. xvi., 287.

Of this book (which, though issued earlier, has reached us later than the last volume of the series, noticed in *MIND*, Vol. x. 469) the first chapter (pp. 1-17) is biographical, the last (c. xiii., pp. 274-287) critical, all the rest expository. The author's point of view is indicated in the remark that Kant "may be regarded as the Julius Cæsar, as Hegel was the Augustus of modern philosophy" (p. 22). The exposition of Fichte is founded chiefly on the *Wissenschaftslehre*, but reference is made to his other writings, "sufficient, it is hoped, to show the relation which the results reached in this work bear to his system as a whole". The author holds that "the so-called earlier and later systems of Fichte" are "the complementary elements of a single system". "The great difference between them is found in the fact that, in his earlier works, Fichte started from psychological analysis, and moved toward an ontology; in his later works, he started from the ontology, and based his psychology directly upon this" (p. 269). Not only did Fichte's dialectical method prepare the way for Hegel, but in part his system was "wrought out with a skill that could not be surpassed". It is Hegel, however, "who makes us feel ourselves most really in the presence of the master of a constructive dialectic". On the other hand, there is more of moral inspiration in Fichte. "Hegel remains the master in the world of thought; Fichte, in that of life."

Outlines of Practical Philosophy. Dictated Portions of the Lectures of HERMANN LOTZE. Translated and Edited by GEORGE T. LADD, Professor of Philosophy in Yale College. Boston: Ginn & Co., 1885. Pp. xii., 156.

Prof. Ladd has with this translation, following upon the *Metaphysic* and the *Philosophy of Religion*, noted in *MIND*, Vol. x. 470, completed the first part of his scheme of introducing English readers to the series of Lotze's *Dictate*; and it is to be hoped that he will not fail to proceed with the *Psychology*, the *Æsthetics*, and the *Logic*, in regard to which he renews a conditional promise. In the case of the *Practical Philosophy*, he follows the second German edition which had gone back from the paragraphs given in the first edition as last dictated in 1880 to the earlier form of 1878—and this for the reason that the earlier cast included sections on Marriage and the Family and on the Intercourse of Men afterwards omitted. The translator (who proved his competence in the *Metaphysic*) remarks on the special interest attaching to the *Practical Philosophy* in that it gives, in default of the unwritten third part of his system, the only approach to a systematic treatment of ethics which Lotze has left; and he truly notes, among other points, that Lotze shows rare and delicate tact in discerning the weak places in the extremes of Rigorism and Eudemonism in morals. An Index is added, as in former parts of the translated series.

On Small Differences of Sensation. By C. S. PEIRCE and J. JASTROW, Johns Hopkins University. Pp. 11.

'An off-print of a paper in Vol. iii. of the *Transactions of the U.S. National Academy of Sciences* (read Oct. 17, 1884), giving account of a series of experiments on the pressure-sense, instituted with a view to disproving Fechner's hypothesis of discrete increments of sensation. The experiments seem to the authors to "destroy all presumption in favour of an *Unterschiedsschwelle*".

Essai sur le Système philosophique des Stoïciens. Par F. OGÉREAU, Agrégé de Philosophie. Ouvrage récompensé par l'Académie des Sciences morales et politiques. Paris : F. Alcan, 1885. Pp. xii, 304.

The author divides the history of Stoicism into three periods : (1) the purely Greek period (the 3rd and part of the 2nd century, B.C.); (2) the period of its propagation at Rome, during which, however, it remained essentially Greek (the latter part of the 2nd and a considerable part of the 1st century B.C.); (3) the Roman period (to the end of the 2nd century A.D., after which it was no longer a living philosophy). In c. i. the "Unity of doctrine among the first Stoics" is demonstrated. Then follows a continuous exposition of the Stoic system (cc. ii.-ix.), treated under the heads of "Being"; "The World"; "Man"; "The Criterion of Truth"; "Dialectics"; "The Sovereign Good"; "The Sage; the City"; "Theodicy and Religion". This exposition is founded as much as possible on the records of the teaching of the earlier Stoics down to Panaetius; it is unmingled with criticism, but is accompanied by references and quotations in footnotes. The last chapter (x.) demonstrates the "Preservation of the primitive doctrine among the last Stoics". The result is that, while from the point of view of literary and of general history the most important position may have to be assigned to the later Stoics, to Seneca, to Epictetus and to Marcus Aurelius, in doctrine they added nothing to what they had received from their teachers. From the point of view of the history of philosophy and of scientific ideas, justice has not yet been done to the founders of Stoicism, to Zeno, to Cleanthes and to Chrysippus, who in their physics were the first to indicate "the antinomy of determinism which alone renders science possible and of liberty without which all morality disappears," an antinomy which they solved in the spirit of Leibniz; who in their logic made "one of the happiest efforts to explain how the existence of error does not destroy all possibility of certitude"; and who in their theory of the *summum bonum* placed morality, as Kant did afterwards, not in what is done but in the internal disposition, while they had over him "the advantage of being able to give logically a material content to the form in which consists exclusively the morality of our acts". The author seeks to show that, in spite of the paradoxes to which it was led by its clean-cut logical distinctions, Stoicism, in accordance with its metaphysical doctrine of the continuity of all being, always kept in view the shades by which opposite things and actions pass into one another. Its paradoxes, therefore, are paradoxes chiefly in form and are corrected by the spirit of the doctrine.

La Morale d'Épicure et ses Rapports avec les Doctrines contemporaines. Par M. GUYAU. 3me Édition, revue et augmentée. Paris : F. Alcan, 1886. Pp. 292.

With M. Ogereau's *Stoïciens*, which may now serve as its companion-piece, has to be noted a new edition (substantially unaltered) of M. Guyau's *Épicure*, the value of which, on its first appearance, was duly appreciated in MIND, Vol. iv. 582.

Les Principes de la Morale. Par ÉMILE BEAUSSIRE, Membre de l'Institut. Paris : F. Alcan, 1885. Pp. 307.

This work, after an Introduction on "The Present Crisis in Morals," falls into four parts: (1) "Formal Morals," (2) "Subjective Morals," (3) "Objective Morals," (4) "Metaphysical and Religious Morals." The ideas are not published for the first time, but have all been carefully reconsidered and worked into coherent form. Critical notice (already in print) is unavoidably deferred.

Éléments de Psychologie Physiologique. Par W. WUNDT, Professeur à l'Université de Leipzig. Traduits de l'Allemand sur la deuxième édition avec l'autorisation de l'Auteur par le Dr. ÉLIE ROUVIER, de Pignan, précédés d'une nouvelle Préface de l'Auteur et d'une Introduction par M. D. NOLEN, Recteur de l'Académie de Douai. Avec 180 Figures dans le Texte. 2 Tomes. Paris : F. Alcan, 1886. Pp. xxxii., 571, 532.

In the absence still of any English translation, this French rendering of Prof. Wundt's celebrated work should be welcome to many English students who are unable to read the original. It is specially prefaced by a couple of pages from the author himself (written at the end of 1884), as well as by a fairly appreciative summary of his psychological work from M. Nolen, to whom the translation is dedicated by a grateful pupil. Prof. Wundt, in his few paragraphs, after generally commending the exposition by which M. Ribot (in *La Psychologie allemande*) first made him known to French readers, takes occasion to correct the one false impression which he thinks M. Ribot gave, in representing the experimental movement as having decidedly gained the upper hand in Germany: however this may be hoped for in the future, it is not so at present. "In Germany, there are a number of psychological directions profoundly at variance with one another, though their representatives agree in detesting experimental or physiological psychology, and in being inclined to consider the teaching of its principles and results as a sort of blasphemy. They think of it as Dogberry did of thieves: 'For such kind of men, the less you meddle or make with them, why, the more is for your honesty'."

La Science romaine à l'Époque d'Auguste. Étude historique d'après Vitruve. Par A. TERQUEM, Professeur à la Faculté des Sciences de Lille. Extrait des *Mémoires de la Société des Sciences, de l'Agriculture et des Arts de Lille*. Paris : F. Alcan, 1885. Pp. 174.

This volume is a careful exposition of the state of the physical sciences at Rome in the time of Augustus, based on the information given incidentally by Vitruvius in his work on architecture. The course of the exposition is accompanied in each chapter by translated extracts from Vitruvius. The chapters are: (1) "General remarks on Vitruvius and his treatise on Architecture"; (2) "Historical anecdotes"; (3) "Manners and Customs"; (4) "Mathematics—Astronomy"; (5) "Mechanics"; (6) "Physics"; (7) "Chemistry"; (8) "Natural History—Geography—Geology—Materials of Construction"; (9) "Hygiene—Medicine"; (10) "Of the different species of Constructions".

Les vraies Bases de la Philosophie. Par B. FAUG. Deuxième Édition. Paris : E. Dentu, 1885. Pp. 323, lii.

This book begins with a "Succinct Résumé of the principal Systems of Philosophy" of all ages and nations (pp. 1-83). Here is the information

offered (under the head of "Positivism") on contemporary English philosophy. "In England, Stuart Mill, more an economist than a philosopher, but more of a metaphysician than Littré, in his *Essays on Logic founded on Induction*, is only half a positivist; it is the same with Huxley. Both have declared that society could not exist without religious dogma" (p. 78). An Appendix of 52 pp. consists of a summary of the history of France from the Roman times, concluding with some controversial matter relating to current politics. Between the Introduction and the Appendix the author reviews the sciences from astronomy to biology (Bk. i., pp. 84-184), "refuting" Darwin and Haeckel by the way; describes "The three intelligences in man and the origin of the particular mental faculties" (Bk. ii., pp. 185-256); and discusses the question "Ought man to be abandoned to himself, or ought he to impose on himself a religious dogma?" (Bk. iii., pp. 257-316). It is concluded that "a religious dogma is indispensable to society" (p. 305). The author himself proposes an eclectic creed, the "principal points" of which are arranged in the form of three "duties towards God," thirteen "duties towards one's neighbour," and six "duties towards oneself". In order to "unite men in the same philosophical views" and thus prevent society from falling "more and more into anarchy," he thinks it is absolutely necessary "to form an assembly of men of moderate spirit," who are to "constitute a code of philosophy upon irrefutable data" (p. 315).

Les Sentiments, les Passions et la Folie. Explications des Phénomènes de la Pensée et des Sensations. Cinq Conférences faites à la Salle des Capucines en 1884. Par AMÉDÉE H. SIMONIN, Membre et Lauréat de la Société nationale d'Encouragement au Bien. Paris: J. Michelet, 1885. Pp. 431.

M. Simonin, who is also the author of a *Treatise on Psychology*, a *History of Psychology* and a volume entitled *Materialism Unmasked*, here undertakes to establish that "the soul exists by itself," on the ground that "its faculties called memory, will, observation, comparison, reflection, &c., have no corresponding organs in the brain". To the parts of the brain he assigns "psychophysical" functions subordinate to the faculties of the soul; describing the pineal gland, for example, as "a psychophysical instrument of which the soul makes use for its needs as the telegraph clerk makes use of his electrical machine" (pp. 12-13). If man will not recognise "the laws of the psychical world" as here set forth, and recognise also "the action of Providence," then, in the author's opinion, he will soon be "*gorillisé, changé en bête, comme feu Nabuchodonosor*" (p. 401). After explaining his doctrines in Part i., M. Simonin goes on to describe two imaginary cities: the first, "Insaniapolis" or "the civilised world governed by the passions," as it is at present; the second, "Raisonville" or "society living under the empire of the laws of reason" demonstrated in the present work. In his Second Part, he attacks pretty impartially members of the Academy, Malthusians and Opportunists, as well as Materialists and German Pessimists.

Les Principes de la Découverte. Réponses à une Question de l'Académie des Sciences de Berlin. Par TH. FUNCK-BRENTANO, Professeur à l'École libre des Sciences politiques. Paris: Plon, Nourrit & Cie.; Leipzig: Duncker & Humblot; Luxembourg: F. Beffrit, 1885. Pp. vi., 264.

The Academy of Sciences of Berlin having offered a prize for the best critical exposition of the philosophical theories of causation that have influenced science during the last three centuries, with a view to the solution of the question as to the true meaning and validity of the law of causation, the author sent in the two answers printed in the present volume: the

first in French (pp. 1-168); the second and shorter (pp. 171-242) in German (here accompanied by a French translation). The thesis maintained in the first essay is that no statement of the law of causation by any modern philosopher has had or could have had the smallest influence on science, but that Aristotle's theory of causation is capable of perfectly explaining all the scientific discoveries of modern times. Aristotle, indeed, has had no direct influence on modern science; his statement of the law of causation is confused, and in the sixteenth century could only be misunderstood along with his other doctrines; but after three centuries of scientific discovery, it has at length become possible to see in Aristotle's principles the ground of all the progress that has been made. Aristotle's two principles, when disentangled from the confusion in which he leaves them, are (1) that the cause is that which is primitive in the 'kind' to be explained, (2) that induction gives the universal by the discovery of ideas between which there is no difference. "It was Galileo, by his great discovery of the laws of the fall of bodies, who gave the most remarkable example of the accuracy of the Aristotelian rules. Stones fall because bodies attract one another in the direct ratio of the masses and the inverse ratio of the squares of the distances, that is to say, stones *fall* because the parts of matter, the primitive of the kind in question, the cause according to Aristotle, *fall* towards one another in the direct ratio of the masses and the inverse ratio of the squares of the distances, ideas the same contained in the same manner in each of the parts of matter." In the second essay it is argued that all modern statements of the law of causation involve a vicious circle, but that Leibniz has supplied a basis for scientific discovery in the principle of sufficient reason, of which the law of causality is "an elementary and incomplete form". It has been the author's intention, in a paper read before the Academy of Moral and Political Sciences and printed at the end of the volume (pp. 245-264), to reconcile the answers given in the two essays by showing the agreement between "the law of causality interpreted according to the theory of the greatest philosopher of Greece and the principle of sufficient reason as it was formulated by the most illustrious thinker of Germany".

E. SPENCER ed E. MORSELLI. *Scienza e Religione*. Milano-Torino: Fratelli Dumolard, 1884. Pp. 47.

The Director of the *Rivista di Filosofia scientifica* here reprints a (translated) article of Mr. Herbert Spencer's on "The Past and Future of Religion" (an extract from Part vi. of the *Principles of Sociology*) which has already appeared in his Review, along with a criticism of Mr. Spencer's general doctrine of the relations of science and religion, published in the same number. His first line of criticism is that, Mr. Spencer's point of view (in *First Principles*) being admitted, the ultimate conception of religion and of metaphysics, the conception of the unknowable, or of the ideal, cannot be identified with the ultimate conception of science, the conception of an unknown reality, an "infinite and eternal energy". The sentiment of philosophic "admiration" which, according to Mr. Spencer, is excited by this energy, has nothing in common with the religious sentiment of "veneration". The attitude of the human mind towards nature has gradually passed from the emotional to the intellectual, in other words, from the religious to the scientific phase; and the scientific and religious attitudes are inconsistent with one another. But further, Mr. Spencer's point of view is inconsistent with positive philosophy. The desire to frame some hypothesis of an "absolute" or "unknowable" is, it must be admitted, ineradicable from the human mind; but to the problem of satisfying this desire neither science nor positive philosophy has anything to say.

Die Italienische Philosophie des neunzehnten Jahrhunderts. Von Dr. KARL WERNER. Dritter Band: Die Kritische Zersetzung und speculative Umbildung des Ontologismus. Wien: G. P. Faesy, 1885. Pp. xiv., 424.

Vols. i. and ii. of this work were noticed in *MIND*, Vol. x. 479. The new volume brings down the history of the Italian philosophy of the 19th century to the immediate present. Three more volumes are to follow, dealing respectively with contemporary philosophy as a whole (iv.), with the special philosophical disciplines so far as the thought of the Italian civilisation has specifically stamped itself on them (v.), and with the specifically ecclesiastical philosophy of Italy (vi.). The divisions of the present volume are (1) The critical decomposition of Ontologism (Giuseppe Ferrari, Ausonio Franchi, Criticism as transition to Christianity in the "teleological objectivism" of B. Mazzarella); (2) The pantheistic transformation of Ontologism in Italian Hegelianism (Vera, Spaventa, Mariano, d'Ereole, the reaction against Hegelianism in South and North Italy); (3) The return-movement of reconciliation of modern Ontologism to the speculative Mysticism and Scholasticism of the Middle Age (A. Conti).

Essays. Von WILHELM WUNDT. Leipzig: W. Engelmann, 1885. Pp. 386.

These *Essays*, some of which have already been printed, range over a wide field of psychological and philosophical study. The last three (xii.-xiv.) are applications of the author's ideas to slightly outlying subjects. Two of these ("Der Aberglaube in der Wissenschaft," "Der Spiritismus") are to be regarded as studies of aberrant psychical phenomena; the third ("Lessing und die kritische Methode") is intended to illustrate the method of exact criticism from the classical examples of Lessing's *Laokoon* and *Hamburgische Dramaturgie*. The thought that is expressed in the opening essay on "Philosophy and Science," and that runs through the book, is applied in this last essay to literary criticism. Lessing's critical method is here explained to be the development before the eyes of the reader of the exact course of the writer's own thought. Lessing always begins with concrete examples, from these gradually proceeds to general principles, and then ends with the further application of these general principles to details. The method of philosophy, the author maintains, ought to resemble this critical method rather than the method of abstract deduction. Philosophy should no longer try to hold itself independent of the special sciences as in antiquity; but, instead of attaching its speculations to the ideas of common consciousness, should set out from the critically tested results of special research. In antiquity the special sciences were really branches of philosophy, but this relation has become inverted: they are now rather its foundation. A movement towards unity following the detachment of science from philosophy, which was effected in the Alexandrian period, is already perceptible in special science itself. In "The Problems of Experimental Psychology" (v.), Prof. Wundt contends that, while its point of view has long since been passed, Cartesian dualism has become in modern times a kind of philosophic orthodoxy like the Aristotelianism of the Middle Age. Psychology must overcome this traditional doctrine by taking from the hands of mechanical science the weapon of exact experimental research. There are in this essay some interesting remarks on the relations of psychology to comparative mythology and the science of language. Prof. Wundt thinks that in the end more will be gained for psychology from the study of the myths preserved in the literatures of ancient civilised peoples than from study of the beliefs of modern

savages. On the other hand, the languages of uncivilised peoples, in the material offered by the laws of formation of words, perhaps promise more to the psychologist than the fixed languages of civilised races. The opposite, again, is the case with rules of syntax. It is pointed out as a favourable circumstance for the psychologist, that, just when the experimental methods of physiological psychology cease to be applicable, speech offers itself as an object which, through its independence of the observer and its modifications under changing conditions, is adapted for experimental investigation. Here we see what an extended sense is given to the "experimental method" that is advocated, in opposition to the method of "self-observation" (taken in the sense of attention to passing states of consciousness) which Prof. Wundt condemns as unscientific.

Logos. Ursprung und Wesen der Begriffe. Von LUDWIG NOIRÉ. Leipzig: W. Engelmann, 1885. Pp. xvi., 362.

In this new work the author reaffirms the doctrine that reason is coextensive with speech, and that the essential character of man is his power of thinking by means of general conceptions, which without words are impossible. The problem that the science of language offers to philosophy is, he says, to explain how the limited number of roots to which it brings back actual languages were formed originally as the signs of activities. This problem he attempts to answer by successively limiting it. First, primitive roots must denote *human* activities; secondly, these activities must be *social*; lastly, it is only *social creative* activities that have the capability of awakening thought and speech together. The general theory of language maintained by the author in opposition to the "imitation" and "interjection" theories, he describes preferably as the "Logos-theory". His solution of the problem of the origin of general conceptions, "the most important in the whole of philosophy," and the special subject of the present work, is a kind of Conceptualism. He holds that "the great advance of modern philosophy is the clear consciousness of the possession of general conceptions as particular beings in the thinking spirit". The ancients had not this clear consciousness, but spoke of "things" when they meant concepts. The founder of Conceptualism was Abelard; but in the Middle Ages, preoccupied with the inner life, it was impossible that due importance should be assigned to objects or to words. Locke, in tracing knowledge to experience, gave their part to objects; he also showed the dependence of thought on speech; but although he recognised that words are not the signs of things but of concepts ("abstract ideas"), he could not solve completely the problem of general conceptions, because he did not recognise the creative activity of thought. It was left for Kant, by a new departure in philosophy, to make possible the completion of the theories both of Locke and of Abelard.

Der psychologische Ursprung des Rechts. Von Professor Dr. J. HOPPE. Würzburg: A. Stuber, 1885. Pp. 103.

An examination of Dr. Stricker's *Physiologie des Rechts* (see MIND, Vol. x. 310), together with the statement of an alternative theory of the origin of law and the sense of "right". In the author's view the "consciousness of right" ought to be traced to "the noble feelings of the knowing being" not to primitive feelings of power. We must not seek for its origin in "contracts" and "juristic rights," themselves inexplicable without the possibility of that satisfaction of the "noble" or "spiritual" feelings in which the "right" consists. It is because these feelings do not find full expression in actual contracts and their observance that the State

has to interfere with its superior force. Penalties are consequently to be regarded as imposed in the interest of the noble feelings by the government in its quality of impartial spectator. Thus the sense of right, present from the first, gradually finds expression in law, an expression which, however, must always remain inadequate. The growth of law, therefore, can give no help towards the explanation of the origin of this sense.

Die Vollendung des Sokrates. Immanuel Kant's Grundlegung zur Reform der Sittenlehre dargestellt von Dr. HEINRICH ROMUNDT. Berlin: Nicolaische Verlags-Buchhandlung (R. Stricker), 1885. Pp. vi., 304.

This book bears the same relation to the practical philosophy of Kant as the author's *Grundlegung zur Reform der Philosophie* (see MIND, Vol. x. 626) to the theoretical. Like the previous work, it is intended, first of all, as a "simplified and extended" exposition of Kant's results. What Kant did in practical philosophy was to complete the Socratic doctrine of virtue and to give it a scientific character. In doing this he solved the problem of the highest good by preparing a secure passage from knowledge to faith. The author is dissatisfied with all other interpreters and successors of Kant, whom he divides into "creepers" (the Neo-Kantians) and "fliers" (Fichte, Schelling, Hegel). "But in truth neither the creepers nor the fliers are to be compared with Kant. For Kant wished that Reason in philosophy should neither fly nor creep, but, like man himself, walk upright between earth and heaven," the head raised to the regions of Faith, the feet set firmly on the solid ground of mathematical and physical science (p. 301).

Kantischer Kriticismus gegenüber unkritischem Dilettantismus. Von Dr. J. H. WITTE, Professor der Philosophie an der Universität Bonn. Bonn: Cohen, 1885. Pp. 66.

The author, while replying to a pamphlet of Dr. Stöhr, called forth by his review in the *Philosophische Monatshefte* of the latter's *Analyse der reinen Naturwissenschaft Kant's* (1884), takes occasion to set forth the general principles of the critical philosophy "in opposition to uncritical dilettantism," with a view to the interests of a wider circle of readers than those who have followed the controversy between himself and Dr. Stöhr. The reply to Dr. Stöhr extends to p. 30; in the first of two appended sections (viii., pp. 30-33), the author proposes a modification of Kant's deduction of the categories; in the second (ix., pp. 33-40) he gives a useful classified index of the more important Kantian literature of the last 25 years. The notes especially (pp. 41-66) have an interest independent of the particular controversy. In the last ("A word on Goethe's relation to Kant and Spinoza") it is contended that Kant's influence on Goethe was greater and Spinoza's less than is generally supposed.

Kant's Theorie der Erfahrung. Von HERMANN COHEN, Professor an der Universität Marburg. Zweite neubearbeitete Auflage. Berlin: Dümmler, 1885. Pp. xxiv., 616.

This second edition of Prof. Cohen's classical work is more than twice the size of the first edition (1871). The Introduction (pp. 1-79), which now replaces a short introductory chapter of 10 pp., contains a full account of Kant's relation to his predecessors from Plato onwards. The part of that chapter dealing with "the logical determination of space and time" is incorporated with c. i., which corresponds to c. ii. of the first edition. Chapter v. of the old edition ("Trendelenburg's view of the gap in the transcendental proof") is now omitted. Two or three changes are made in the titles of chapters; cc. iii. and iv. of the first edition are transposed;

c. vii. of the first edition is divided into two; and two new chapters have been added (pp. 551-616), "Das Princip der formalen Zweckmässigkeit" (c. xv.) and "Das System des kritischen Idealismus" (c. xvi.). For the rest, while the general plan of the work is preserved, the modifications do not consist merely in additions; those parts that are substantially identical with the chapters of the first edition have been thoroughly revised, in many cases rearranged and rewritten. That which has been from the first the author's view of Kant is thus restated: "Till the time of Kant there was metaphysic as art; only with him begins metaphysic as science" (p. 576). The historical is not to be disconnected from the "systematic" view of Kant; in the importance, other than historical, of Kant's work for every student of philosophy is the real justification of that minute study of his words that has been called "Kant-philology". The principal new developments in this edition are in two directions. In order to make more complete the exposition of that part of the theory of experience that has the closest connexion with the ethical theory, the doctrine of Ideas had to be "taken up into the doctrine of Experience". This has been done on the basis of the author's intermediate work, *Kant's Begründung der Ethik* (see MIND, Vol. iii. 153)—the ethical doctrine itself being of course excluded from the present exposition. For this rehabilitation of the part of the doctrine of Ideas that belongs to the theory of Experience, "the quintessence of the Synthetic Principles," the account of which the author considers to have been defective in the first edition, had to be sufficiently developed. Adequate treatment of the whole body of them became easier when the principle of Intensive Quantity was disclosed as central among them; while also their elements—Space, Time, and the Categories—had new light thereby thrown upon them. Insight into the significance of the central principle, joined with consideration of the principle of Anticipations, determined the second direction in which new developments have been found necessary. It was seen that Kant's relations to mathematical and physical science, and in particular to Newton and Leibniz and their conception of infinitesimals, required more exact definition. The author's work, *Das Princip der Infinitesimal-Methode und seine Geschichte* (see MIND, Vol. ix. 159) was intended to supply the basis, so far as this conception is concerned, for the historical view now sketched in the Introduction. The new edition is dedicated "to the memory of Friedrich Albert Lange".

Die Lehre vom apriorischen Wissen in ihrer Bedeutung für die Entwicklung der Ethik und Erkenntnistheorie in der Sokratisch-Platonischen Philosophie. Von Dr. phil. M. GUGGENHEIM. Berlin: Dümmler, 1885. Pp. 79.

The development of Plato's doctrine of *a priori* knowledge is here treated in relation to his ethics. In the putting of the Socratic question as to the nature of virtue in the *Meno*, the author sees the starting point of this whole development, which in the *Phædo* culminates in the distinction between the worlds of "being," "the true," "the good," on the one hand, and of "becoming," "the false," "the bad," on the other; the former of these being the object of *ἐπιστήμη*, the latter of *ψευδὴς δόξα*. In the middle of the development comes the *Theætetus*, where the most important distinctions of the Platonic theory of knowledge are to be traced; and here, accordingly, is for the author the centre of interest. In his last two sections (pp. 37-79) he discusses minutely the polemic against Protagoras; showing how a positive doctrine of *a priori* knowledge was developed in opposition to Sensualism by means of this polemic, and how it was connected in the mind of Plato with "the ethical-æsthetic ideas" which were the beginning and the end of his philosophy.

Kant's Lehre von der Freiheit. Ein Beitrag zur Lösung des Problems der Willensfreiheit. Von Dr. CARL GERHARD. Heidelberg: G. Weiss, 1885. Pp. 84.

Kant's doctrine of freedom is expounded in Sections i.-iv.; Section v. is a criticism of the Kantian doctrine; in Section vi. (pp. 59-84) the author attempts a positive solution of the problem of freedom. He accepts from Kant the position that without free-will there can be no moral responsibility; and he refuses to acknowledge as true freedom the "empty fiction" of a "liberty of indifference". Freedom is the power man has of taking part in the formation of his own character. Human freedom is always relative and limited; for the direction is already given in many respects to character at birth by innate dispositions; but only so far as character is the work of freedom is a man responsible for his character. This freedom is quite compatible with the necessity of human actions. Freedom is not the opposite of necessity but of compulsion; the opposite of necessity is contingency (p. 76). "Particular actions are necessary," being the product of character and motives, "but the will, or rather the person willing, is free". The freedom of the person is manifested in action according to fixed maxims. This view of freedom the author regards as founded on Kant's doctrine, and as substantially identical with the essential part of it. The placing of the free act outside time, and the distinction of the intelligible and the empirical character, are indeed rejected. But, as regards the first point, it is contended that Kant also recognises the freedom that consists in the power of modifying character in the actual course of life; and, as regards the second point, the term "character," as used by the author, is really identical with Kant's "intelligible character". For the effect of the Kantian doctrine of the "intelligible character" is to attach the idea of freedom to that in man which is internal, instead of to its external or "empirical" manifestations.

Das Grundgesetz der Wissenschaft. Von EMANUEL JÄESCHE, Dr. med. Heidelberg: G. Weiss, 1886. Pp. xx., 445.

The fundamental law of scientific knowledge, which it is the author's aim to set forth, is the requirement that each group of things should be completely determined as a "scientific whole" in relation to the unity of knowledge. The conception of knowledge as a unity, and of the determination of things in relation to it as the end of science, is to be kept in view in every kind of special research. This idea, stated in the "General Part" (pp. 3-36), the author tries to work out in the "Special Part" of his book (pp. 39-445), under the heads of "The corporeal World," "The animated World," "The conscious World," and "The self-conscious World".

Die Grenzen des Glaubens. Von ANTON ÖLZELT-NEWIN. Wien: C. Konegen, 1885. Pp. 43.

An examination of belief in the law of causation, free-will, &c., intended to show that in each case the only position intellectually justifiable is scepticism. Philosophy will "always remain the science of insoluble questions," and is "more an affair of need and of taste, more an art than a kind of knowledge". With philosophy must be classed religion. "In both, agreement in the most useful belief is possible, not through arguments, but, as in politics, when judgments, feelings, and needs of men have become alike." This agreement is obtained as the result of an authoritative appeal by teachers to the experience of life. The few who carry their intellectual conscientiousness so far as to be inaccessible to such appeals either remain uninfluenced by "those powers that build a world

out of the heart, or philosophy and religion are to them no longer anything but a private belief which becomes silent as soon as it comes into the light of day".

Die Illusion der Willensfreiheit. Ihre Ursachen und ihre Folgen. Von Dr. PAUL RÉE. Berlin: C. Duncker (C. Heymons), 1885. Pp. 54.

The author follows up his investigations of the origin of the moral feelings and of conscience (see *MIND* Vols. iv. 581 and x. 475) by a brief discussion of free-will, which he finds to be "not a moral truth, but a psychological error". The illusion of free-will has two expressions: the belief, as to the past, that we might have acted differently, and the belief, as to the future, that "we can do what we will"; both of which beliefs are true in the sense that there are always more physical possibilities than are actually realised, but false if taken, as they commonly are, in the sense that the will is ever free from the law of causation. The ground of the illusion is that we do not know, or know only imperfectly, the causes of the actions of ourselves and others. When the belief in free-will—in an uncaused beginning of action—is seen to be an illusion, actions and characters may still be to us "sympathetic" or "antipathetic," but—except for a remnant of habit—moral condemnation or praise of the actions of others, as well as remorse or self-approval for our own actions, must disappear. Kant's doctrine of noumenal freedom is founded on this incompatibility of the necessity of human actions with the imputation to them of guilt or merit; together with the fact that, even when men have explained actions, they still pass the same moral judgments on them as before. In criticism of Kant's argument, the author points out that to regard an action as completely determined, to contemplate it "*sub specie necessitatis*" is much more than "explanation" in the popular sense. The power of viewing actions entirely in their causal relations is reached only by a few; and even with those few there are remains of customary modes of thought. When the determinist point of view has been fully attained, the fact is no longer as Kant describes it; all imputation of guilt and merit disappears. To explain this imputation, then, there is no need of the assumption that actions are free; it is sufficient that they are held to be free.

Kritische Grundlegung des Transcendentalen Realismus. Eine Sichtung und Fortbildung der erkenntnisstheoretischen Principien Kants. Von EDUARD VON HARTMANN. Dritte neu durchgesehene und vermehrte Auflage. Berlin: C. Duncker (C. Heymons), 1885. Pp. viii., 138.

This is the third edition of a work which, from the time of its first appearance (under another title) in 1871, has been the occasion of much controversy, and which, in its second form, was reviewed in *MIND*, Vol. i. 407. It forms the first volume of a new cheap edition of Hartmann's selected works.

Der empirische Pessimismus in seinem metaphysischen Zusammenhang im System von Eduard von Hartmann. Von Dr. ALBERT WECKESSER. Bonn: C. Georgi, 1885. Pp. 74.

The author begins by distinguishing the "teleological pessimism" of Schopenhauer, which maintains the complete irrationality of the world, from the "eudemonological pessimism" of Hartmann, which only maintains its irrationality with respect to the balance of pleasure and pain. The earlier pessimism is a necessary consequence of the metaphysics of the alogical Will, while the later and more moderate pessimism (to which, indeed, the term "pessimism," as Hartmann himself admits, is not strictly

applicable) is really in contradiction with the doctrine of the all-wise Unconscious, and has to be brought into Hartmann's system on empirical grounds. It is these empirical grounds that the author sets himself to investigate. While making many criticisms of detail on Hartmann's attempted proof that there is a balance of pain in the world, he directs the chief force of his attack against the application of the eudæmonistic measure to the worth of life. No strictly quantitative comparison of pleasures and pains such as Hartmann attempts is practicable; and even if it were possible to measure feelings in the way proposed, this would not decide the question whether existence is preferable to non-existence. The fundamental error of pessimism is that it regards happiness as the only rational end of the process of things. Not all forms of happiness indifferently need be in causal relation to the principle of things, but only that happiness which is in itself rational because it proceeds from "the moral will". For the production of the moral will a process of development is required, of which pain forms part. The feeling of happiness in which attainment of the rational end manifests itself is accompanied by indifference to the pleasures and pains that proceed from external causes. This was recognised by the ancient moralists of all schools, who placed happiness in an internal state. Hartmann himself makes such an internal state the ethical end of his pessimism. The pessimistic renunciation of the search for happiness in external objects, the identification of the ends of the individual with those of the Unconscious, results in a state of the moral agent by which he is raised above all particular pleasures and pains. The possibility of the attainment of this state makes the eudæmonistic measure inapplicable, and thus ethical pessimism is sufficient in itself to destroy the pessimistic conclusions.

Emil Du Bois-Reymond. Eine Kritik seiner Weltansicht. Von THEODOR WEBER. Gotha: F. A. Perthes, 1885. Pp. x., 264.

This criticism of what seems to the author the thorough-going and consequent materialism of Du Bois-Reymond's view of the world has for its ultimate aim to "Christianise science". Especially, he seeks to refute Du Bois-Reymond's "ever returning affirmation that where supernaturalism begins science ends". The great defect of Du Bois-Reymond's view is found to be "the arbitrary assumption of the eternity of primitive atoms". The true conception of nature is that of a "real principle," at first "indifferent," but capable of becoming "atomised". Nature, thus known as it really is, leads the way directly to God as its creator.

Die Lehre Herbarts von der menschlichen Seele, mit Herbarts eigenen Worten zusammengestellt von HEINRICH FREE. Bernburg: Baumeister, 1885. Pp. viii., 74.

The object of this book is to give such a condensed exposition of Herbart's psychological conceptions as may prepare for the understanding of his pedagogics. The text is entirely in Herbart's own words; only the selection of extracts and the arrangement of the paragraphs being the author's.

Die Lehre vom Wesen des Gewissens in der Scholastik des dreizehnten Jahrhunderts. Ein Beitrag zur Geschichte der Ethik. Erster Theil: Die Franciscanerschule. Von Dr. HUB. THEOPHIL SIMÄR, Professor der Katholischen Theologie an der Universität zu Bonn. Freiburg i. B.: Herder, 1885. Pp. 32.

The author proposes in the present work to give an account of the Scholastic doctrine of the conscience that shall do justice to the minor

figures of the Scholastic movement, neglected in the ordinary histories. For different reasons, he maintains in discussing the origins of Scholasticism, there could be no philosophical doctrine of the conscience either in antiquity or in the Patristic period; and it was in the 13th century that the earliest attempts were made to explain its nature. A part of the Scholastics seek the foundation of conscience in the powers of conation (in modern terminology, "the feelings") and in knowledge; others place it exclusively in the reason. The first conception is that of the Franciscans, Bonaventura and Alexander of Hales; the second that of the Dominicans, Albert the Great and Thomas Aquinas. All the 13th century investigations of the conscience were started by the Aristotelian psychology, especially by the distinction of cognitive and active powers. Further, the form and content of these investigations attach themselves to a gloss taken from the commentary of St. Jerome on Ezekiel, in which conscience is spoken of under the double name of *συνησις* and *conscientia*. Alexander of Hales was the first to make use of this gloss for the construction of a theory of conscience; but Bonaventura was the first to distinguish clearly the two terms by giving the name *synteresis* (or, as it was commonly misspelt, *synderesis*) to the disposition of the will, *conscientia* to the intellective side of conscience. In the Second Part of his work, the author will proceed to the doctrine of conscience as developed by the Dominican school.

Die Erklärung des Gedankenlesens nebst Beschreibung eines neuen Verfahrens zum Nachweise unwillkürlicher Bewegungen. Von W. PREYER, Professor der Physiologie an der Universität Jena. Mit 26 Original-Holzschnitten im Text. Leipzig: Th. Grieben (L. Fernau), 1886. Pp. 70.

In the first of these papers the author describes how Dr. Beard, Dr. Carpenter and himself have all arrived by different ways at the explanation of "thought-reading" from indications given to the thought-reader by unconscious muscular movements. This explanation, suggested to Carpenter by experiments on hypnotism and to Beard by his knowledge of the results of Fritsch and Hitzig, was suggested to the author by his researches on the involuntary impulsive movements of unborn and newly-born animals and of very young children. The second paper contains an account of the construction and use of the apparatus he has devised for registering unconscious muscular movements of all kinds. The descriptions given in the third paper show with how much rapidity and accuracy it is possible for one practised in reading the indications given by these movements to write or draw any numbers, letters, figures, &c., that are intently thought of by the subject of the experiment. The fourth paper is an elaborate critical examination of M. Richet's late attempt (in the *Revue Philosophique*, ix. 12) to prove a direct transmission of thought from brain to brain. Dr. Preyer's conclusion is that out of the whole series of experiments brought in evidence by M. Richet, nothing remains that can lend the least support to the entirely superfluous assumption of a transmission of thought without verbal or other physical signs.

Kleine Schriften. Von HERMANN LOTZE. Bd. i. Leipzig: S. Hirzel, 1885. Pp. xviii., 397.

Dr. D. Peipers here begins a collective reprint of Lotze's minor writings—to exclude only the *Poems* of 1840 and a Latin translation of the *Antigone* in 1857—as they have been made out and catalogued, with perfect care and devotion, by Prof. E. Rehnisch in the appendix to the *Grundzüge der Ästhetik* (see MIND, Vol. ix. 471). The collection will fill three volumes, the third containing at the end a small amount of pre-

viously unprinted matter. The present volume gives 17 pieces down to 1846,—in chronological order, for the sake of the light thereby thrown on the writer's mental development. Beginning with Lotze's Latin dissertation for his medical degree in 1838, it contains, besides one or two medical reviews, the famous article on "Life and Vital Force" in *Wagner's Handw. der Physiologie*, by which he first made his mark, followed by another article on "Instinct"; the two here occupying pp. 139-220, 221-50, respectively. The other pieces (except the mathematical dissertation of 1840, "De summis continuorum") are of general philosophical interest. Most of them are reviews of books (about Kant, Descartes, &c.), but three have a more independent character: (iv.) "Remarks on the Notion of Space," in a letter to Ch. H. Weisse (1841), pp. 86-108; (v.) "Herbart's Ontology" (1843), pp. 109-38; (xi.) "On the Notion of Beauty" (1845), pp. 291-341. The editing has been performed with the most scrupulous conscientiousness.

System der Christlichen Sittenlehre. Von D. J. A. DORNER. Herausgegeben von D. A. DORNER. Berlin: W. Herz, 1885. Pp. xi, 560.

This posthumous work of the distinguished theologian Dörner contains his ethical doctrine. His aim is to find a point of view from which the unity of Christian and philosophical ethics may be seen, at least as a limit to which both equally tend. "The way to this union is long and the reaching of this end nothing less than the whole history of the world," and we are as yet only in the middle of the process; although, even now, a philosophical ethics may become Christian without ceasing to be rational, and a theological ethics need not give up the claim to a severely scientific character. There must therefore be no forcing of union on the two systems from outside. It is not only unavoidable but desirable that attempts should still be made to construct a philosophical doctrine of morality independently of all reference to Christian morality. Yet in the final union, that is to be sought and will at length be attained, between natural and Christian morality, the theological element will not have disappeared from Christianity. This element, indeed, is an essential part of Christian ethics. For of the three stages of moral progress, the stages of "law" or "duty," of "virtue" or law which has embodied itself in habit, and of morality as "highest good" or as the "absolute good" which is identical with God, the last stage, which is the stage of "love" or of "the Gospel," sums up in itself the other two,—the first as well as the second,—for in it the essentially Christian idea of love is united with the philosophical idea of moral law. Now this process is inconceivable apart from the historical and theological element in Christianity; for love cannot be felt towards a law, but only towards a person. The idea of the God-man as the highest manifestation of moral good in the world is thus a necessary idea in ethics. Morality is the only thing in the world that is absolutely good; but there are also goods that are not ethical. In the ideal Christian organisation of the world, or "Kingdom of God," which is the end of the whole movement of things, those goods, such as knowledge, which are not of absolute value would have a place assigned to them, not indeed on a level with morality, but distinct from it. In the ideal Christian state the pursuit of knowledge, for example, and the investigation of all truth on purely natural grounds, would be left perfectly free.

Allgemeine Ethik. Von Dr. H. STEINTHAL, a. o. Prof. für allgemeine Sprachwissenschaft, &c. Berlin: G. Reimer, 1885. Pp. xx, 458.

This treatise, upon a subject to which the author, more than ten years ago, felt himself irresistibly drawn (but without abandoning the psychologico-linguistic studies that have brought him his fame), has been looked for

with interest for some time back. It falls, after an Introduction (pp. 1-92), into four parts: (1) The doctrine of Ethical Ideas, (2) Exposition of the Ideas, or the Forms of Moral Life, (3) The Psychological Mechanism of Ethical Action, (4) The Ethical View of the World. Critical Notice will follow.

Allgemeine Ethik. Mit Bezugnahme auf die realen Lebensverhältnisse pragmatisch bearbeitet von JOSEPH W. NAHLOWSKY. 2te verbesserte u. vermehrte Auflage. Leipzig: Veit, 1885. Pp. xxiv., 366.

This book, by the author of the better-known *Gefühlsleben* (see MIND, Vol. x. 152), appeared originally in 1870. The present edition will receive notice at length later on. Meanwhile, we observe with regret, from a supplementary note by the publisher, that the author died at Graz last January, before the edition saw the light (though he had already written the new preface for it). Nahlowsky was in his 73rd year, and appears to have been long a sufferer; having retired in 1878, through ill-health, from the professorship at Graz which he had held since 1862. A native of Prague, he had originally been in training for the priesthood, but turned to philosophy, and occupied a succession of posts in different Austrian universities from about the year 1845.

RECEIVED also:—

- T. V. Tynms, *The Mystery of God*, London, Eliot Stock, pp. xii., 354.
 M. C. Irvine, *The Symmetry and Solidarity of Truth*, i., London, Williams & Norgate, pp. xvii., 117.
 D. H. Tukey, *The Insane in the United States and Canada*, London, H. K. Lewis, pp. 260.
 E. Dean, *Mind and Brain*, London, Alexander & Shephard, pp. 99.
 S. E. Titcomb, *Mind-Cure on a Material Basis*, Boston (U. S.), Cupples, Upham & Co., pp. 288.
 A. Zocco-Rosa, *Principii d'una Preistoria del Diritto*, Milano, Grieb, pp. 95.
 P. Siciliani, *La nuova Biologia*, Milano, Fratelli Dumolard, pp. xxvi., 408.
 G. Levi, *La Dottrina dello Stato di G. G. F. Hegel e le altre Dottrine intorno allo Stesso Argomento*, Roma, E. Loescher (vol. i.), pp. 257; (vol. ii.), pp. 434.
 G. P. Weygoldt, *Die Platonische Philosophie nach ihrem Wesen und ihren Schicksalen für Höhergebildete aller Stände dargestellt*, Leipzig, O. Schulze, pp. 256.
 R. Eucken, *Beiträge zur Geschichte der neuern Philosophie vornehmlich der deutschen*, Heidelberg, G. Weiss, pp. iii., 184.
 H. Spitta, *Einleitung in die Psychologie als Wissenschaft*, Freiburg i. B., J. C. B. Mohr (P. Siebeck), pp. viii., 154.
 J. Volkelt, *Erfahrung und Denken*, Hamburg u. Leipzig, L. Voss, pp. xvi., 556.
 L. Strümpell, *Die Einleitung in die Philosophie vom Standpunkte der Geschichte der Philosophie*, Leipzig, G. Böhme, pp. 484.
 E. Kaler, *Die Ethik des Utilitarismus*, Hamburg u. Leipzig, L. Voss, pp. 78.
 H. Schuchardt, *Ueber die Lautgesetze*, Berlin, R. Oppenheim, pp. 39.
 H. Schaaffhausen, *Anthropologische Studien*, Bonn, A. Marcus, pp. ix., 677.

Notice of some of these (come to hand too late) is deferred.

IX.—NOTES AND CORRESPONDENCE.

DR. MARTINEAU'S DEFENCE OF "TYPES OF ETHICAL THEORY".

In a review of Dr. Martineau's *Types of Ethical Theory* in *MIND*, Vol. x. 425, while endeavouring to do justice to his positive merits as an expositor of the history of philosophy, I found it my duty to draw attention to certain errors and oversights—sometimes of a rather fundamental kind—into which he had fallen. Dr. Martineau made an elaborate reply to my criticism in the last Number of *MIND*; and the reader—if he has had any experience of philosophical controversy—will have seen without surprise that Dr. Martineau declines to admit that he is in the wrong in any single point. The experienced reader will be no more surprised to learn that a study of Dr. Martineau's defence has led me to form, on the whole, a more unfavourable judgment of his historical work than I expressed in my review; since I find that his misapprehensions of the thinkers whom he has undertaken to expound are more profound than I originally supposed. I scarcely think that further controversy, under these circumstances, is likely to be profitable; at the same time, having undertaken the task of criticising Dr. Martineau's book, I feel bound to state—and therefore to justify—the unfavourable impression which his reply has made upon me. In this difficulty, my best course seems to be to take one of Dr. Martineau's studies, and, confining myself to the points to which my original criticism was directed—which were only a selection of the erroneous or misleading statements that I might have noticed—to examine Dr. Martineau's reply on these points. I shall then ask the reader "crimine ab uno discere omnia".

I will take the study of Plato, with which the book opens. Here the first statement of Dr. Martineau's which I characterised as erroneous, was the following (p. 105): "Equally repugnant to all just valuation of character is Plato's preference of voluntary pravity to involuntary—a preference openly defended by him against the protest of natural feeling". In the note to this passage, the only reference given was to the *Hippias Minor*, 375 D. It was evident, therefore, that Dr. Martineau relied on this passage as a justification of his statement. Now, in the first place, I consider that no one writing about Plato ought to refer to the *Hippias Minor* as an authority for a serious criticism on Plato's doctrines, without at least letting his readers know that the genuineness of this dialogue has been disputed by several eminent commentators, and is still treated as doubtful by critics, like Mr. Jowett, who may be described as conservative in their general tendencies. I did not call attention to this omission in my review, as I myself regard the dialogue as genuine; still, the omission is noteworthy as illustrating the defects of Dr. Martineau's critical work.

But his misinterpretation of the drift of the dialogue is more serious. I certainly think that any reader who is familiar with the dialectical method and manner of Socrates ought to see that the argument to which Dr. Martineau refers is not intended to lead up to a positive conclusion seriously held. The very words of the concluding passage of the dialogue show this plainly:—

"(Socr.) 'Then, Hippias, he who voluntarily errs and does disgraceful and unjust things, if there be such a man, can be no other than the good man.'

"(Hipp.) 'There I am unable to agree with you, Socrates.'

"(Socr.) 'Nor can I agree with myself, Hippias; but yet this seems to be a necessary inference at the present moment from our argument.'"

Even if we did not know from other sources the fundamental importance

attached by Socrates to the proposition 'that no one is voluntarily bad,' the words I have italicised would suggest this solution of the paradox; but as we do know this, there does not seem to me the shadow of an excuse for gravely charging Plato with a "preference of voluntary pravity to involuntary" on the ground of this dialogue; especially as he adopts the above-mentioned proposition as the basis of his main argument in the *Gorgias*—a dialogue regarded as clearly later than the *Hippias Minor* by all who admit the genuineness of the latter.

But Dr. Martineau replies that his charge is justified by a passage "from the latest stage of Plato's development; being found in the *Republic*, 535 E". I must observe, in passing, that the unqualified emphasis he lays on the word "latest" suggests an imperfect acquaintance with recent Platonic criticism; since the current of critical opinion has for some years been setting steadily against the old view that the *Republic* represents the "latest" stage of Plato's development. But I will not lay stress on this now; since whether the passage in the *Republic* is late or early it does not afford the least support to Dr. Martineau's charge; in taking it to give such support he has committed a double *ignoratio elenchi*. For (1) the passage he quotes contains nothing whatever about preference of voluntary falsehood to involuntary; it simply says that 'it is a crippled soul' which hates the former and does not also hate the latter. And (2) the most express preference of voluntary deception to involuntary would not in the least prove a preference of voluntary pravity; since there is no reason why the deception should be supposed to be known to be bad by the deceiver and chosen in spite of this knowledge. Indeed I need hardly remind readers of the *Republic* that Plato regards deception under certain circumstances as good and useful; it is, he says, a useful medicine, though too dangerous for private persons to meddle with; it should be left to the rulers of the State. There is no affinity whatever between this position, and that which Dr. Martineau mistakenly supposes to have been seriously maintained in the *Hippias Minor*.

But the failure of Dr. Martineau to understand the full importance, in Plato's ethical view, of the Socratic identification of virtue with knowledge, vice with ignorance, is still more startlingly shown in his reply to me on another point. I criticised in my review his extraordinary suggestion that Plato, when treating of the cardinal virtues in the *Republic*, may have "felt that Intellect as such could not after all be put upon the seat of guidance, but must itself be made available in the career of life, by a power over it, resolved to lash it to its work," which we may identify with "Conscience or the proper Moral Faculty". I urged that it was opposed to the very essence of Plato's philosophy to conceive of any natural lord or ruler of the soul other than the philosophic reason. Dr. Martineau answers that his interpretation was not intended to depose the philosophic reason; "it only claims for that Reason, in Plato's later conception, a function, missing in the earlier, other than that of simple Intelligence, and approximating to that which we assign to Conscience. There would be no occasion to dispossess the word *νοῦς* of its supremacy; provided it were invested with the meaning not only of 'knowing the true,' but of 'ordering the right'."

This explanation is, in my opinion, even more extraordinary than the original suggestion. Is there not overwhelming proof that at no period of Plato's development could he conceive of the Philosophic Reason as knowing the good without ordering its realisation, so far as possible, in human life? And, even admitting for the sake of argument that this might be true of Plato at some time in his development, is it not manifestly inverting the fundamental order of evolution of his thought to identify that time with his *earlier* and therefore more Socratic period? And

ought not the identification of Philosophy with Virtue, which is an essential point of the main argument of the *Republic*, to have shown Dr. Martineau that this distinction of Conscience, as a separate power set over Intellect as a master to "lash it to its work," was at any rate absolutely impossible to Plato at the time that this dialogue was composed? It seems to me that all these questions must be answered unhesitatingly in the affirmative.

So far my criticism of Dr. Martineau has related to points in Plato's doctrine as to which I cannot profess to find any difficulty or ground for hesitation. The case is different when we come to Plato's views on the question of Free-will. Here I should characterise Dr. Martineau's statement as one-sided and inadequate rather than simply erroneous; he does not see that Plato's fundamental psychological conceptions preclude him from giving to the modern question of Free-will the clear answer which Dr. Martineau tries to elicit from him. To put it briefly, we may say that, while Plato is anxious to resist the Determinist excuse for vice, his psychology inevitably precludes him from being really Libertarian; he has every wish to fix on the individual the full responsibility for his bad conduct, and he does this as impressively as he can in the *Republic* by the mythical representation of an uncontrolled choice among human lots by the disembodied soul, but when we press him for an account of volition, the freedom vanishes. The wrongness of any volition is completely explained by given conditions of the mind willing, whether these conditions are conceived as purely intellectual defects or as defects in the relations established between rational and non-rational impulses. To say that he "admits no necessity but as the consequence or after-stage of freedom, and puts the Will before the Must, fetching the determinate out of the indeterminate as its *prior*" is to make him talk modern Libertarianism in a quite unwarrantable way. Even in the fable of the *Republic* the fateful choice of the disembodied soul is not represented as "fetched out of the indeterminate"; it is expressly and emphatically referred to the conditions—"want of capacity and skill" or "folly and greediness"—which the soul brings with it to the choice.

Finally, in my review, I demurred to Dr. Martineau's characterisation of Plato's ethics as "Unpsychological"; pointing out that this could not properly be said of the ethical doctrine expounded in the *Republic*. Dr. Martineau, in his reply, admits that this is true "if by his ethical doctrine is meant his criticism of current notions, his dialectic sifting of proverbial maxims, his analysis of the Hellenic State and his remedial rules for escaping its ills"; but says that this is not an "ethical theory" but an "ethical art". Certainly; but I did *not* mean this kind of thing when I spoke of Plato's "ethical doctrine"; I meant primarily his theory of Virtue expounded in book iv., and secondly the analysis, classification, and comparison of Pleasures given in book iv. As Dr. Martineau himself in speaking of the former says that it is "made to rest on a psychological base," I am surprised that he has misunderstood me. He says that what he means by a psychological theory of ethics is not "constituted by processes of logical search and psychological illustration". But it is not a question of psychological *illustration*; the analysis by which Plato distinguishes three active principles in the individual soul—Reason, Appetite and *τὸ θυμωδές*—is the basis on which his whole theory of Virtue is constructed. To call such a theory "Unpsychological" seems to me a misleading departure from the common usage of language.

I trust the reader will now consider that, by examining this sample of Dr. Martineau's answers to my criticisms, I have sufficiently justified the unfavourable opinion of the historical portion of his reply which I expressed at the outset of this paper. At the same time, I think that his study of

Plato is interesting and instructive, in spite of its errors : and I think the same of most other parts of his historical work. The remarks that I have to offer on his explanation and defence of his own ethical theories, I reserve for a more convenient occasion.

H. SIDGWICK.

By permission of the author I have read the foregoing rejoinder, and through the courtesy of the Editor append a few brief notes.

My allegation that Plato "preferred voluntary pravity to involuntary" is declared to be unfounded, (1) because made "on the strength of a passage in the *Hippias Minor*,"—a disputed dialogue ; and (2) because at variance with the Socratic principle, "No one is voluntarily bad". The reader is led to suppose that I rely exclusively on the *Hippias Minor*, and that I take no account of the Socratic principle.

There are two passages of the *Types of Ethical Theory* which ascribe to Plato the controverted "preference". The earlier of these (i. 70) states it *in extenso*, lays it side by side with the Socratic maxim, and suggests an interpretation which enabled them to coexist ; giving as authority, along with the reference to the *Hippias Minor*, one to the *Republic*, which repeats the same doctrine. The later passage (i. 105), occurring in an ethical recapitulation, merely recalls the former sufficiently to render a comment intelligible, and therefore does not repeat the double reference. Prof. Sidgwick, quoting and criticising only the latter, blames me for not noticing the doubts about the *Hippias Minor*. In my judgment, they would in themselves have had little relevance ; and, in presence of the passage from the *Republic*, none at all. Doctrines found in common in one of the slightest and in the greatest of the Platonic writings, appear to me fairly attributable to the Master's philosophy. Prof. Jowett says : "The 16th debatable portion" (of the dialogues) "scarcely in any degree affects our judgment of Plato, either as a thinker or a writer ; and though suggesting some interesting questions to the scholar and critic, is of little importance to the general reader" (Translation of Plato, 2nd Edition, vol. ii., p. 140).

The passage in the *Republic* is said, however, to give me no support, (1) because its admission is not of voluntary *pravity*, but of voluntary *lies* ; (2) because it separates these from involuntary by no degrees of comparison (implying "preference"), but demands equal condemnation for both. It stands thus : "With regard to truth, shall we not pronounce it but a crippled soul that hates and cannot bear voluntary falsehood, and is angry beyond measure with itself and others for telling lies, yet lives on easy terms with involuntary falsehood and feels no annoyance at being caught in ignorance, but is content to wallow in it like a swinish brute?" (1) In proof that Plato did not think of these "lies" as having any "*pravity*," appeal is made to his defence of occasional resort to deception. Such defence is also found in the *Methods of Ethics* (iii., ch. 7, § 3, p. 319) : what would the author say, if, after describing the liar's compunction at his lies in such terms as Plato's, he were treated as perhaps seeing nothing bad in them ? Deception, spoken of in general terms, does not lose its *pravity* for one who finds room for a rare exception. (2) If this passage does not compare the voluntary fault with the involuntary, and denounce the folly of taking the former for the worse, I know not what words can do so : put the two *hates* on an equality, and the sense of the proposition is lost.

In referring this passage to the "latest stage of Plato's development," I did not use the phrase of the final stadium of his *literary activity*, or forget the group of dialogues between the *Republic* and the *Laws*. I meant to mark merely the complete escape of his thought from its Socratic base into the structure created by his own genius. The subsequent modifications bear more the character of critical corrections and appropriations from contemporary influences than of features in his personal development.

I cannot then explain away the evidence of Plato's preference of voluntary to involuntary sins. Does not such preference, however, conflict with his principle, 'No man is voluntarily bad'? Certainly it does: but this does not cancel the possibility or the fact of their coexistence in his mind under favour of some inexactitude of phrase. The key to the riddle is found in the ambiguous range of the term *ἐκούσιον*. Do I *will* whatever I *intend*? or only what I *wish*? If the former, then in all the foreseen evils of my wrong-doing I am voluntarily bad. If the latter, my aim is at some good, seized at the price of undesired ills; I will an act that is bad, but it is not the badness that I will. Did I see it as it really is, I should recoil from it with hate. While both these usages are found in Plato, they finally disengaged themselves from one another; and in the *Laws* he will no longer allow the epithet "voluntary" to be applied to "wrongs," but only to the "*hurts*" involved in them; and carries out to its consequences the doctrine that the "bad are always involuntarily bad" (ix. 860 D.—863).

Since I used the word *pravity* merely as a collective term for *depraved acts*, I had better have chosen a plural common noun than a singular abstract, which unintentionally seemed to jostle the Socratic maxim.

In ascribing a modified meaning to the tripartite division of the soul on passing from the *Phædrus* to the *Republic*, I am not conscious of going beyond the limits of Prof. L. Campbell's remark that there is "ground for caution in comparing the two steeds of the *Phædrus* with the Spirit and Desire of the *Republic* and *Timæus*. The *Phædrus*, in common with these dialogues, asserts the existence of higher and lower impulses in human nature; but there is no sufficient ground for supposing that, when Plato wrote the *Phædrus*, he would have defined them precisely as they are defined in the *Republic*." (See *Encycl. Brit. Art.*, 'Plato,' 202 b.) And as, among his deviations from the Socratic ethics, he came to admit a virtue of *habit* as well as of *insight*, and invoked a power to hold each of the three parts of the soul to its business, without meddling with the rest, it seems simple enough to invest the Reason, liable as it was to be taken as *Speculative*, with a function of new aspect that makes it also *Practical*.

On the remaining paragraphs I have nothing fresh to say; and I take leave of my respected reviewer with thanks for his criticism,—thanks less bright and pleased, no doubt, but not less true, for its severity.

JAMES MARTINEAU.

PROF. TH. LIPPS'S "GRUNDTATSACHEN DES SEELENLEBENS".

Prof. Th. Lipps of Bonn has written at considerable length to complain that his reviewer in *MIND*, Vol. x. 605 failed to give any adequate notion of the scope of his *Grundtatsachen des Seelenlebens*. There is ground for the complaint, though the fault lies less with the reviewer than with the too narrow limits to which, for so extensive a work (709 large-sized pp.), he was confined. What reparation is possible is now made to Prof. Lipps by subjoining the larger (expository) part of his communication,—which will have the more interest for readers of this Journal as coming from one who, by his own allowance, has worked so much upon the traditional lines of English psychology:—

"The work seeks to give the outlines of a pure Psychology, that is to say, of a psychology which, without metaphysical presuppositions as to the "essence" of the soul and without physiological hypotheses, proceeds only upon that which results immediately from contemplation of the processes of consciousness, or can be concluded from them by means of the law of causality. Psychology, in such case, must have recourse to unconscious mental processes, and this universally. But of these also the science asserts only what it may and must assert on the ground of conscious-

processes. In particular the question is entirely left aside, what physiological significance the unconscious processes may have. The aim is to make the "fundamental facts of the mental life," that is to say, the mental and spiritual phenomena which compose or must compose the content of Psychology in the narrower sense,—and further of the Theory of Knowledge, Aesthetics and Ethics,—build themselves up, so to speak, out of the ultimate elements and by means of the most general laws. The ultimate elements are the simple Sensations, or the component parts of them, so far as these admit of being psychologically discovered; the laws are the laws of Association on the ground of Similarity and Simultaneous Concurrence in the mind, and the law of the "Narrowness of Consciousness". To these add the law of "Fusion" which results from them on certain presuppositions. On the other hand, all forces and powers are rejected that claim to be anything else than another expression for the joint action of these elements and laws,—also Attention and Will so far as appearing to be active factors of a special kind. The whole work is a thorough-going Association-psychology; it therefore shows itself everywhere dominated by the contrast of the two kinds of Association. The mental life is represented as a result of the mechanism of Association, but without prejudice to its dignity, and in particular without impeaching the freedom of the will, or rather of the personality so far as it has moral significance.

"The first chapters of the book prepare the ground. They mark the place and problem of (pure) psychology, criticise hurtful prejudices and discuss the most general facts. With reference to these chapters, the reviewer is right when he says the interest of the work is "more in the treatment of general questions than in the details". On the other hand, the very contrary is true of the following chapters, left entirely unnoticed by the reviewer, and comprising over 500 pages. They certainly have in view, like every scientific investigation, to gain knowledge as general as possible; but only on the ground of analysis of the manifold facts, going into the minutest particulars. Still less grounded is the affirmation that the work is one "where the author's aim is chiefly to set forth what is already known". Of the disclosure of entirely new, till now entirely unheard-of, mental processes, naturally there can be little to say. On the other hand, the *theory* is in important respects an entirely new one; and where this is not the case, at least it modifies existing theories and places them in new points of view. Finally, I even raise the claim to have been the first to put, and consequently the first to seek an answer to, many important questions. The views of others are, on principle, only brought in so far as the criticism of them appeared serviceable to my own constructive aims; so that the reader would find himself misled, who, trusting to my reviewer, expected to learn from the book "what general conceptions have become most prominent in contemporary German psychology, and what kind of modifications in them are proposed by a German critic". Here the accentuation of *German* psychology is again misleading, since with regard to my general conceptions I believe myself to owe much to English psychology.

"Of the first chapters of the book I will say no more. Chapters ix.-xv. (pp. 177-362) investigate the flow of representations as it develops itself under the influence of the relations (*Verhältnisse*) of similarity (agreement, affinity) and contrast; cc. xvi.-xxii. (pp. 362-451), the flow of representations as it shapes itself under the influence of "*Beziehungen*," that is to say, of the associations resting on experience. In these sections many questions of detail had to be discussed, which elsewhere are not commonly raised. How on the ground of "*Verhältnisse*" and "*Beziehungen*" representations support or impede one another, how connected series of representations separate from one another and become firmer, how tracks

are formed upon which representation proceeds more and more easily, how the stream of representations breaks off and stops its course, how representations or complexes of such are raised out of the stream and made into objects of special interest, while others are pressed back and robbed of interest,—all these questions, not to be solved by mere “general conceptions,” are considered at length. The investigation is based both on immediate observation and on psychical measurements so far as yet carried out; these being to some extent discussed in detail. On the other hand, the discussion opens out everywhere into fundamental questions of *Æsthetics* and *Theory of Knowledge*.

“Besides what has just been indicated, I draw attention in particular to the following additional points. In c. ix., for example, there is a general theory of pleasure and pain; c. xi. gives a theory of harmony and discord which modifies and re-establishes an old theory unjustly banished by Helmholtz and Wundt; c. xii. treats of physiological and—what is quite different from this—psychological “contrast”. This last subject is treated further in c. xiv., which, in immediate connexion with the phenomena of psychological and æsthetic fatigue, derives the various psychological and æsthetic effects of contrast from the mechanism of representation.

“The first chapter of the second of the two sections mentioned above contains among other matter an explanation of our æsthetic interest in the human form, landscape, &c. It is shown that the interest rests on associations of experience which are pointed out in detail. Chapter xvii. discusses apperception and the classes of judgments, in particular the judgments of comparison and of “*Beziehung*”. The latter kind of judgment results of itself from the reciprocal action of combinations of representations as determined by experience. Just in the same way, according to c. xviii., from the reciprocal action of judgments result in succession the concepts or “categories” of condition, ground, cause and substratum. In the series of these categories every successive category marks only a special case of the foregoing. But they all have modes of association of representations for their peculiar content. The law also that every change requires its cause is derived from the law of Association. There follows in c. xix. the contrast of things and personality. The unity of personality or of the *Ego*, as also of the foreign personality standing over against it, originates for our consciousness in experience. The section concludes at c. xx. with a discussion of the mechanism of thinking, so far as it has general content. Induction and deduction, the origin and nature of the concept, and language as the vehicle of general thinking, find here their place.

“The whole fifth section is devoted to Space and Time, in particular giving (at a length of 116 pages) a new and complete theory of the origin of the intuition of space, which again I may best characterise as a thorough-going Association-theory. Or is this theory also “already known” to my reviewer? A German critic calls it “interesting and original”. I hope it is also correct. At least I know till now no other that can stand beside it. Other leading divisions concern tactile space, the origin of the third dimension, the union of the spatial images of the different senses, illusions of ocular measurement (including one not previously observed).

“Lastly, the sixth section deals with Conation, as an activity of representation struggling against hindrances. The investigation opens out into the fundamental conceptions of Ethics and also of *Æsthetics*. For the personality, as it is the object of moral willing and judging, is also the true content of all beauty; as, again, the negation of the personality is the essence of evil and ugliness. The different kinds of conation—deliberation and expectation, desire and wish, will and sense of obligation—begin the section. Chaps. xxviii. and xxix. go more into detail and discourse of the many kinds of content or end of conation, in particular of the highest end, the person-

ality of self and others, of the different possibilities of origination, enhancement, lowering, suppression of conation, of "disillusionings" and the comic, lastly of the mental movement proceeding from the representation of that which is striven for and terminating in action. Here again psychical measurements had to be considered and pointed out in detail. But the whole falls, just like the investigations of the "flow of representations," under the conception of the mechanics of representation resting on Association. The same is true also of the contents of the last chapter, which has to do—I admit, only in very broad outlines,—with the good and the bad, the beautiful and the ugly, with love and hatred, the tragic and the comic, that is to say, with the fundamental moral and æsthetic conceptions. That Ethics grows out of Psychology and also how it grows,—to show this was the principal end of this chapter.

"The foregoing is not intended to give the contents of the book, but only to point out that the book has contents. Let me be pardoned for having spoken so self-consciously; I was compelled to do so. I am not anxious that my views should be accepted. But I do claim that in the book I have willed to produce something of my own, and that I have done it to some purpose."

FIRST NOTIONS OF THE UNSEEN IN A CHILD.

The following notes may interest some readers of MIND. My little son has never been taught anything whatever of the supernatural, so that what notions concerning unseen powers he has or has had are of perfectly spontaneous growth. The first positive sign he gave me of having any ideas of this sort occurred last November when he was one year and ten months old. He had never in the least objected to being put to bed in the dark, but I suppose it at this time had begun to have certain terrors for him, for he suddenly one night soon after he had been put to bed set up a most dismal howl. I went at once to him and asked him what he was crying about. He was comforted at once on hearing my voice, and answered promptly "bout Cocky". I assured him that "Cocky" was far away at Bradfield, alluding to a country place from which he had lately come, and where the cocks and hens,—all known as "Cocky,"—had been very particular friends of his, and where he used to be quite willing to visit them alone. But from this time forth "Cocky" was and is the name used by him to distinguish the creature of his imagination, though the "Cocky" of real life still remains with him an object of affection. This and the next few nights were the only nights he objected to his dark bedroom. After that it did not strike him as terrible, and he has since always been put to bed quite in the dark without the slightest sign of fear.

The next night, or only a few nights after, I was walking upstairs, with him a few steps in front of me, past the door of the bath-room in which the cistern was making rather mysterious hissing noises. He hurried past it quite quickly for his little legs, half looking back all the time, and said to me, "Cocky in 'ere". "Cocky" now became partially localised in the bath-room. A few days after we were passing the room by daylight. He was now in an extremely brave and propitiative mood and ran in boldly and kissed at the air in the room and said to me self-complacently "Hennie kiss Cocky". "Hennie" is his name for himself, a corruption for *Henry*. A few days after we again passed the room by daylight. He had some little toy in his hand. He was now in a less brave but in an equally propitiative mood. He thrust his little hand through the half-closed door and threw in the toy, laughing rather hysterically and saying, "Hennie give toy Cocky". But the bath-room was not always an awful room, and seems now that he is two years and four months old not to be remembered

as the habitation of the awful one at all, except very occasionally. And even during the time that I have just mentioned, though it was at times terrible to him, it was usually only the bathroom and nothing more, for he would walk into it fearlessly with or without me, and only once or twice I have noticed him take my hand and lead me rather anxiously out of the room, giving however no reason for doing so.

About two months ago, my little boy being then two years and two months, he came to me and said complainingly, though not apparently at all frightened, "Cocky in Hennie's tungup". "Tungup" is his word for *stomach*. As this remark was shortly followed by an attack of diarrhoea, I have no doubt that he felt some pain in the part indicated, which he attributed to the malicious agency of "Cocky". Again, twice within the last few months he has complained, saying, "Cocky on Hennie's head". Whether he felt some pain or discomfort in his head I cannot say, but I think it probable that he did.

I think the fear of "Cocky" is now passing away. I seldom hear his name mentioned. The last time I heard any striking reference to him was a fortnight since. We were staying away from home. In the bedroom which we occupied was a bed hung round with a dark valance. He lifted this up inquisitively to see what was underneath; but to his eyes, accustomed to the light, all looked pitch dark. He quickly let the valance drop, and ran to me saying, "Cocky under muvver's bed".

When his belief in and fear of "Cocky" was at its height his references to him were constant, and I have only mentioned here those of especial interest.

He personifies the sun in an amusing way. One day when he was about two years and two months old he was sitting on the floor in a great temper over some trifle. He looked up and saw the sun through the window. He suddenly stopped crying and said angrily, "Sun *not* look at Hennie". He said this two or three times, and then finding the sun persistently "looked" at him, he changed his tone to one pathetically imploring and said, "*Please* Sun not look at poor Hennie". I have noticed this adjuration of the sun when he has been crying two or three times since.

E. M. STEVENS.

THE ARISTOTELIAN SOCIETY FOR THE SYSTEMATIC STUDY OF PHILOSOPHY. —The Seventh Session was opened on Monday, Oct. 26, by an Address from the President on "Philosophy and Experience," in which the principles of a new method for applying subjective analysis to the whole content of experience were laid down, and the resulting systematisation of philosophy described. On Monday, Nov. 16, the subject of Kant's Ethical System, selected as the special subject for the present Session, was opened by a paper from Mr. Scrymgeour, on Kant's *Grundlegung zur Metaphysik der Sitten*. On Monday, Nov. 30, one of the evenings devoted to original communications, Mr. D. G. Ritchie read a paper on Plato's *Phædo*, which was followed by a discussion. [For short notice of the President's Address, see p. 123, above].

Dr. W. B. Carpenter died on the morning of 10th November last, from the effects of a frightful accident. He had just completed his 72nd year, having been born on 29th October, 1813, at Bristol. Besides doing first-rate work as a naturalist all through his life, he signalised himself early by his philosophical grasp of biological principles, and was led, through careful study of the physiology of the nervous system in man and animals, to the development of striking and original views in psychology. These, after having long before been sketched out in occasional writings and in his well-known *Human Physiology*, got final expression in his *Principles of*

Mental Physiology (1874), a work that deals in the most interesting way especially with the class of abnormal mental phenomena. The end so tragic to a life full of high purpose, strenuous endeavour and remarkable achievement has been widely and deeply lamented.

M. Th. Ribot, editor of the *Revue Philosophique* and who has done more than any other Frenchman to bring his country into line with the foremost in the advance of scientific psychology, has just been appointed, by M. Liard, Director of Superior Instruction (himself an open-minded worker in philosophy), to a newly founded chair of Experimental Psychology in the Sorbonne. This is a veritable sign of the times. Prof. Ribot now takes a place, as the representative of modern scientific methods, in the venerable corporation; lecturing, in the present session, on "The Sentiments and Emotions according to contemporary psychology," by the side of MM. Caro, Janet, Waddington and other upholders of the French official tradition.

Dr. R. Reicke, University-Librarian in Königsberg, has long been engaged in collecting the correspondence of Kant, for publication by Leopold Voss in Hamburg. Collector and publisher earnestly request that to either of them should be sent any information as to hitherto unpublished letters of Kant's, or any, the slightest, notices of him by his contemporaries; these last often proving of no small importance when brought into relation with the materials already in hand.

Mr. J. T. Merz's *Leibniz* (in the series of "Philosophical Classics for English Readers") has just been translated into German, under the superintendence of Prof. C. Schaarschmidt of Bonn, who gave it high commendation in the *Philosophische Monatshefte*. The publisher is G. Weiss of Heidelberg.

Prof. A. Krohn of Kiel who, after being for a time conjoined with Ulrici, succeeded him in the editorship of the *Zeitschrift für Philosophie, &c.*, has now, since Bd. lxxxvi. 2, obtained a coadjutor in Dr. R. Falckenberg, *Privatdocent* in Jena. The *Zeitschrift* is by far the oldest of German philosophical journals, and has done good work in its time, though in later years it has rather lost ground. A serious effort is now being made, by editor and publisher (R. Stricker of Halle), to bring it again well to the front, both by materially improving its external form (in the last two Nos.), and by giving to its contents a greater amount of present interest. The old idealistic point of view will be adhered to, as never more than now needing to be maintained; but (1) by giving special heed to "the theory of historical phenomena," (2) by deliberate general surveys of the movements of thought (rather than by a mass of hurried criticism of particular books), and (3) by taking regular account of the philosophical activity of foreign countries, it is hoped that a new reputation may be won. The latest No. (contents given below) is intended as a specimen of what is to follow.

THE JOURNAL OF SPECULATIVE PHILOSOPHY.—Vol. xix., No. 2. R. A. Holland—Immortality. B. S. Lyman—The Character of the Japanese. Goeschel—On the Immortality of the Soul. W. T. Harris—The Immortality of the Individual. Notes and Discussions.

REVUE PHILOSOPHIQUE.—An. x., No. 10. Ch. Féré—Sensation et mouvement (avec figures). B. Pérez—La conscience et l'inconscience chez l'enfant de trois à sept ans. P. Tannery—Le concept scientifique du continu: Zénon d'Elée et G. Cantor. Observations et Documents (Bourru et Burot)—Un cas de multiplicité des états de conscience avec changement de personnalité. Analyses et Comptes-rendus. Rev. des Périod. No. 11. F. Paulhan—Les phénomènes affectifs au point de vue de la psychologie générale (i.). V. Egger—Sur quelques illusions visuelles (avec figures).

J. Héricourt—La graphologie. Notes et Discussions (J. Delboeuf—Une hallucination à l'état normal et conscient. Sur les suggestions à date fixe. S. Reinach—L'idée du bien et du juste). Analyses, &c. (F. H. Bradley, *Principles of Logic*, &c.) Rev. des Périod. No. 12. E. Naville—La doctrine de l'évolution comme système philosophique. F. Paulhan—Les phénomènes affectifs, &c. (fin). E. Gley—Le "sens musculaire" et les sensations musculaires. Notes (C. Stumpf—Sur la représentation des mélodies). Analyses. (J. T. Merz, *Leibniz*, E. Caird, *Hegel*, &c.) Rev. des Périod.

LA CRITIQUE PHILOSOPHIQUE (Nouv. Sér.).—An. i., No. 9. C. Renouvier—Les problèmes de l'esthétique contemporaine : La nouvelle métrique L. Dauriac—*Les Origines*, par M. de Pressensé. . . . Notices bibliog. No. 10. C. Renouvier—La morale criticiste et la critique de M. A. Fouillée (iii). . . . L. Dauriac—Du criterium de la vérité selon M. H. Spencer. . . . Notices bibliog. No. 11. F. Pillon—*L'Idée de la responsabilité*, par Lévy-Bruhl. C. Renouvier—Intelligence et conscience : l'esprit est inséparable de l'âme. F. Pillon—Eugène Pelletan et sa philosophie du progrès. L. Dauriac—La philosophie à la Sorbonne. E. Pétavel-Olliff—La vieille théologie et la nouvelle. . . . Notices bibliog.

LA FILOSOFIA DELLE SCUOLE ITALIANE.—Vol. xxxii., Disp. 1. F. Masci—Sulla natura logica delle conoscenze matematiche (i.). B. Labanca—Storia critica delle religioni : Giudaismo e Cristianesimo (fine). A. Valdarnini—Il Mamiani e la questione economico-sociale. Bibliografia, &c. Disp. 2. L. Ferri—Un libro recente di psicofisiologia : L'ipnotismo. F. Masci—Sulla natura logica, &c. (ii.). R. Bobba—Un nuovo libro sulla storia della filosofia. Bibliog., &c. Disp. 3. G. Jandelli—Le malattie della personalità. F. Tocco—Quistioni platoniche. F. Masci—Sulla natura, &c. (fine). Bibliog., &c.

ZEITSCHRIFT FÜR PHILOSOPHIE, &c.—Bd. lxxxvi., Heft 2 (only now come to hand : contents should have been given in MIND 39). C. T. Isenkrähe—Das Unendliche in der Ausdehnung (Schluss). K. H. v. Stein—Ueber den Zusammenhang Boileau's mit Descartes. F. Sattig—Der protagoreische Sensualismus u. seine Um- u. Fortbildung durch die Sokratische Begriffsphilosophie. Bd. lxxxvii., Heft 2. R. Eucken—Die Philosophie des Thomas von Aquino ab u. die Kultur der Neuzeit. E. v. Hartmann—Köstlin's *Ästhetik*. Anon.—Streifzüge durch die Philosophie der Gegenwart. R. Falckenberg—Ueber die Bedeutung der Philosophiegeschichte u. den Charakter der neueren Philosophie. J. Walter—Ueber Reformversuche der Ethik, speciell Witte's Buch über die Freiheit des Willens. Recensionen, &c.

PHILOSOPHISCHE MONATSHEFTE.—Bd. xxii., Heft 1, 2. C. Gerhard—Kant's Lehre von der Freiheit. E. v. Hartmann—Ein vergessener *Ästhetiker*. J. Witte—Ein kurzes Wort zu O. Gierke's Beurtheilung des neuesten Werkes von W. Dilthey. Recensionen u. Anzeigen (R. Flint, *Vico*, &c.). Litteraturbericht. Bibliographie, &c. Heft 3. M. Sartorius—Die Realität der Materie bei Plato. Recensionen. Litteraturbericht, &c.

VIERTELJAHRSSCHRIFT FÜR WISSENSCHAFTLICHE PHILOSOPHIE.—Bd. ix., Heft 4. Schmitz-Dumont—Der Gegensatz. R. Wahle—Bemerkungen zur Beschreibung u. Eintheilung der Ideenassociationen. B. Kerry—Ueber Auschauung u. ihre psychische Verarbeitung. Anzeige. Selbstanzeigen, &c.

PHILOSOPHISCHE STUDIEN.—Bd. iii., Heft 1. G. Th. Fechner—In Sachen des Zeitsinnes u. der Methode der richtigen u. falschen Fälle, gegen Estel u. Lorenz. G. O. Berger—Ueber den Einfluss der Reizstärke auf die Dauer einfacher psychischen Vorgänge mit besonderer Rücksicht auf Lichtreize (mit Taf. 1). J. M. Cattell—Ueber die Trägheit der Netzhaut u. des Sehcentrums (mit 4 Holzschnitten). O. Fischer—Psychologische Analyse der stroboskopischen Erscheinungen (mit Taf. 2). L. Nedich—Die Lehre von der Quantifikation des Prädicats in der neueren englischen Logik.